MARCH
1951

fueloil & oil heat

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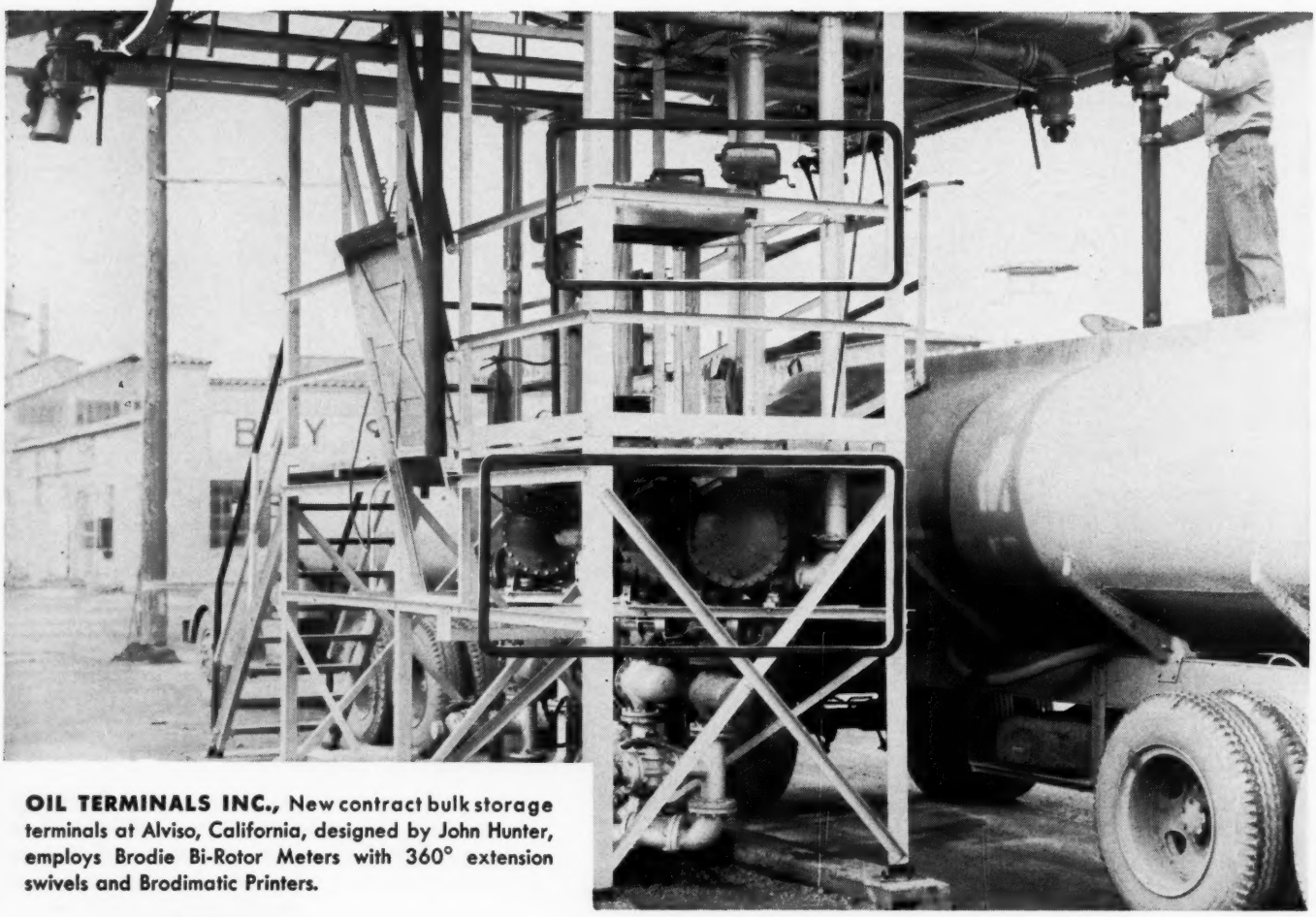
19th NATIONAL OIL HEAT EXPOSITION
April 2-6-1951
NAVY PIER
CHICAGO
And 28th Annual Convention Sponsored by
OIL HEAT INSTITUTE OF AMERICA

Faster TRANSPORT LOADING
from BULK STORAGE TERMINAL



OIL TERMINALS INC., New contract bulk storage terminals at Alviso, California, designed by John Hunter, employs Brodie Bi-Rotor Meters with 360° extension swivels and Brodimatic Printers.

Brodie 360° swivel adaptor permits counter to be turned in any direction while meter is operating without affecting accuracy of reading.

With Meter-Controlled ACCOUNTING SYSTEM

Loading out bulk products for distribution from contract storage terminals requires speed, combined with fully accurate accounting of each company's withdrawals. With Brodie Bi-Rotor Meters there's no tie-up of transport equipment—no maintenance shutdowns. Equipped with Brodimatic Printers adaptable to various size forms, and embodying identification wheels to register product, meter, and operator, this meter-recorded accounting method keeps inventories in balance at all times. For complete details, write for Bulletin 608, today.

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MARCH fueloil & oilheat 1951

VOLUME 10 NUMBER 3

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APPLICATION FOR SECOND CLASS ENTRY PENDING AT BALTIMORE, MD.

LEOD D. BECKER, *Chairman, Board of Directors*

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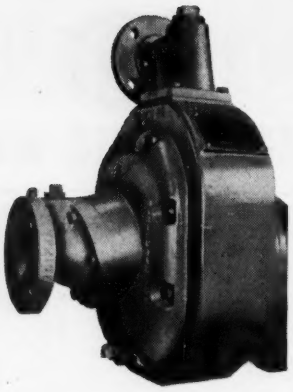
Among other things . . .

Since this is the Pre-show issue, looking to the annual convention and exposition of the Oil-Heat Institute of America at Chicago the week of April second, the largest single feature is on that topic. Bert Dunphy has spent plenty of hours coaxing the lists to his desk, not to mention the programs and the elusive speakers.

The accomplishment of Horace Davenport in letting a bunch of intelligent high school kids run his business for a day provides a public relations yarn that is hard to equal. At the same time it says to other dealers and fueloil distributors "Go and do thou likewise."

Kraemer is in again with the third and best of his series on financial management, best only because now he takes his hair down and tells all about how you have probably run out of bounds on some point. Then a brand new series begins, from the lush brain of Harland Ragle, advisor on fueloil distributing methods to Eastern bigwig companies.

With Today's MARGINS a Man Has to Keep Costs Down!



. . . That's exactly why more marketers, large and small, are installing Marlow pumps in both plants and trucks. With more new features and advantages, Marlow has given the petroleum industry a new concept of *pumping* and of *pumping costs.*

PLANTS Oil Associates, Inc. of Amityville, N. Y. is a typical retail fuel oil marketer using Marlows. Rugged, reliable Marlows are always accurate; require practically no maintenance.

TRUCKS Marlow truck pumps are a guarantee of fast delivery and accurate metering. Shutdowns and layups are almost non-existent.

USE THIS COUPON

As manufacturer of the world's largest line of petroleum marketing pumps, Marlow can help you. Write without obligation.

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Ridgewood, N. J.

☐ Please send me helpful literature
☐ Please have a representative call

Name .....

Company .....

Street .....

City ..... State .....

Names in the News

J. Alan MacDonnell has been named assistant general sales manager, Gilbert & Barker Mfg. Co., West Springfield, Mass., replacing Kenneth S. Edwards, retired. He will assist Irving C. Jacobs, vice president and general sales manager, in administering the company's 4 sales divisions. Mr. MacDonnell joined Gilbarco in 1934 and served on its oilheating engineering staff in New York, Detroit and Chicago. In 1941 he became district sales manager in Ohio and Michigan and during the war returned to the factory as ordnance engineer. He next resumed field sales work in the Middle West, returning again to the factory in 1947 as manager of the oilheating sales division, later becoming assistant to the sales manager.

D. E. Sedgwick, former secretary and sales manager, has become vice president in charge of sales and advertising, Waterman-Waterbury Co., Minneapolis, Minn. Other officers named were *Harry G. Cross,* president and *Ben O. Schwarz,* secretary and treasurer.

J. L. Matthewman has joined White Fuel Corp., Boston, Mass., as assistant to the president, a position that has been vacant for several months. He formerly was marketing assistant in the cargo and marine sales department, Esso

AMERICAN-Standard

First in heating . . . first in plumbing

Just the unit for jobs where installation space is limited

The WINTERGLO
oil fired
winter air conditioner

so compact it fits into closets, alcoves and corners

■You'll have many opportunities to sell this attractive, efficient unit to your small home and apartment prospects—especially where a first floor or utility room installation is required.

Engineered exclusively for oil firing, the Winterglo Winter Air Conditioner comes in two sizes, 85,000 and 105,000 Btu output per hour at bonnet. Listed for closet installation by Underwriters' Laboratories and approved for less than standard clearance, it fits perfectly into the smallest amount of space in new construction or modernization jobs.

Built to rigid specifications, the Winterglo features such quality construction details as a heating element of heavy gauge steel; combustion chamber of heat-resisting stainless steel, leakproof welded seams; double inlet type blower; and quiet motor.

While we recommend that you sell the Winterglo as a complete unit with its own special flange model Arcoflame Oil Burner, it may be installed for use with any other suitable oil burner.

For further information about the Winterglo and other winter air conditioners in the Sunbeam line by American-Standard, contact your Wholesale Distributor. **American Radiator & Standard Sanitary Corporation,** P. O. Box 1226, Pittsburgh 30, Pennsylvania.

Factory assembled and pre-wired for easy installation . . .

Factory assembled and pre-wired, the Winterglo will pass through standard doorways. Can be installed in a fraction of the time previously required for a job of this type. Light weight makes installation easy.

Look for this AMERICAN-Standard HEATING · PLUMBING *Mark of Merit*

Serving home and industry

AMERICAN-STANDARD · AMERICAN BLOWER · CHURCH SEATS · DETROIT LUBRICATOR · KEWANEE BOILERS · ROSS HEATER · TONAWANDA IRON

Sheared to Size for Your COMBUSTION CHAMBERS!

Have your Engineering Department check your percentage of scrap saving!

We are specialists in producing heat-resistant stainless steels for combustion chambers. Whether you are a large or small user of these steels our steel-making facilities can offer exceptional service by especially shearing to your specified combustion chamber steel blanks, or multiples thereof.

Ingersoll

HEAT-RESISTANT STAINLESS STEELS

Give your combustion chambers all four operating advantages

1. MORE QUIET BURNER OPERATION
2. CLEANER HEAT
3. BETTER TEMPERATURE CONTROL
4. CONSIDERABLE SAVINGS ON FUEL COSTS

Write for additional information

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310 South Michigan Avenue • Chicago 4, Illinois
Plant: New Castle, Indiana

ENGINEERING B-W PRODUCTION

Standard Oil Co. in New York, with whom he had been associated for 16 years, originally with the fueloil sales department. During the last war he was first with the Army and later with the fuel division, Navy Bureau of Supplies and Accounts. In addition, he was associated with the Army and Navy Petroleum Board, the Allied Tanker Coordinating Committee, Supply Programming Group that met in London in 1945 and the tanker allocation division, War Shipping Administration.

W. E. Pflieger has been appointed to the newly-created post of special representative of the Williams Oil-O-Matic Dealer Retail Activity Dept., Williams Div., Eureka-Williams Corp., Bloomington, Ill., in one of the first moves in expansion plans for the Department. *H. H. Hurston,* who had been field sales representative for central Illinois, succeeds Mr. Pflieger as New York metropolitan area field sales representative. Mr. Pflieger's territory will include the New England states and the Eastern seaboard. He will counsel dealers on merchandising campaigns, advertising and promotion plans, market analysis, hiring and training of salesmen and establishment of sales quotas.

Duane W. Rouse has become service manager, Toridheet Div., Cleveland Steel Products Corp., Cleveland, Ohio. He first joined Toridheet in 1932 and has been conducting its service and installation training programs in recent years. Recognized as a wall flame burner expert, Mr. Rouse returned to Toridheet in 1947 after leaving the heating field temporarily during World War II. Prior to that he had worked in Toridheet's engineering and service departments and the development laboratory.

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Inspection Mirrors - Air Bands

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Screw Machine Products Assemblies
Metal Stampings

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Editorial Leaks

If it's at all possible for you to go to Chicago for the annual convention and exposition of the Oil-Heat Institute, don't pass it up. It will occupy the full week starting Monday, April 2, but if you can't spare the whole week, the most important days are Tuesday, Wednesday and Thursday. Those are the days of the general meetings.

In an unsettled economic year such as we face in 1951 nobody knows all the answers. That includes us, it includes you, it includes the Oil-Heat Institute. But you can't listen to a dozen speakers without taking home a much better idea of the market and its probable trends than you could possibly get in any other way. Don't lean back and say that you can get them all in the magazine anyway. No magazine has the space these days to do any more than hit the high spots on such an array of material. You always get more real meat by seeing the men and hearing everything that they will say.

Convention speakers are not supermen. They don't employ crystal balls nor ouija boards. But before they will get up before a large audience and stick their necks out you can be sure that each one of them will spend quite a lot of time on research and study. They have to do that in order to make up their own minds on the points they plan to cover. So you will be getting the results of a lot of collective digging that you couldn't take the time to do individually, even if you had access to all of the sources that these men have. A studied opinion, however accurate, is more apt to be right than the "horseback" impressions that we all so often rely on.

None of the speakers is paid, either for his time or expenses. That's the best arrangement, because then they can feel free to say anything they think, beholden to no one. They do this job in the spirit of trying to help us navigate through the fog, for the good of the industry as a whole. Your investment in time and expense will be more than repaid by being on hand.

Then the exposition out at the Navy Pier is sure to reward the time you spend there. Manufacturers are not asleep; they know their problems and yours. Some of them will have some answers; you're going to need them.

❖

There's a table called "Annual Work Output of Men and Animals" in the new "Fuels and Combustion Handbook" by Allen J. Johnson, just published by McGraw-Hill. The table clears up a point that has bothered us, thus:

Horse	600 kwh/year
Buffalo	
Camel	
Ox	550 kwh/year
Mule	450 kwh/year
Ass	150 kwh/year
Man	150 kwh/year

You can draw your own conclusions since the manual has nothing further to add to the subject, but we know what they mean.

❖

The employees of Griffin Fuel Co., Seattle, are publishing a monthly bulletin to circulate only within their crowd, in which they razz each other and in general have fun.

The December issue discloses that when one of them asked Fred Griffin, the chief, for a raise, he observed, "If you're not happy with what you have, what would you do with more?"

❖

One of our good friends among the dealers has voiced a worthwhile criticism of the magazine. He asks, "Why don't you take the trouble to dig up more stories about the operation of small dealers? It may be stimulating for us to read about the Sherwoods and the Davenports and the Vinings, but a guy with two fueloil trucks and selling 20 burners a year can't use many of their methods."

We do get a few small dealer stories, a couple a year, but obviously not enough. Numerically they represent the majority of our readers. They have been very willing and cooperative in sending their operating figures for our market studies. Without their help the figures would be lopsided.

Some of our most enjoyable days have been spent in small towns studying the business of a dealer who has built for himself a satisfying and comfortable life in oilheating. We'll be around to see more of them this year.

❖

In former years the March issue has carried a table showing the breakdown by states of the oilheating installations made in the previous year. This time we promised it too, but couldn't deliver.

Before undertaking this chore, a difficult one, we get in hand the final official figures on factory shipments, exports and the like, to develop our own final estimate of the total; then we break it down.

This year the boys at the Census Bureau who tot up the shipment figures have not been able to develop the December data. The returns from manufacturers are in but the analysis is late. It's not the fault of those faithful individuals, but the defense program bigwigs are making them burn the midnight oil on some special studies. The table should be in the next issue of the magazine.

❖

For some reason in this issue there is no feature material on how to fight gas. Maybe we've gone soft and can't think of anything else to say for the moment. But some of our authors or contributors will before long.

Industry men have been getting a grin over the Sun Oil Co. tanker that dropped her anchor right through a natural gas pipeline lying on the bottom of the Delaware River. Some oil men wonder if the skipper did it on purpose. We don't think he could be that accurate, unless he took several shots at it, which the story doesn't mention. Anyway a few thousand South Jersey homes were in trouble until emergency arrangements were made.

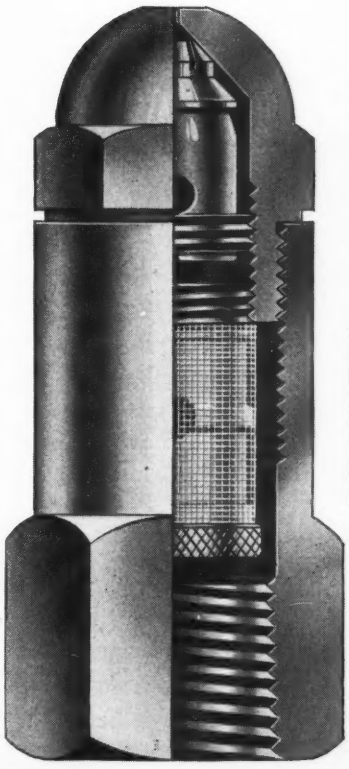
It would be theoretically possible for a ship to drop its anchor on an oil truck, but one or the other of them would have to be out of its natural element . . . doing it the hard way

Timely Tip:

Uncertain period ahead!

It is more important than ever that you keep your customer-service interruptions at an absolute minimum with oil-burner products by

Eddington



Eddington Oil Burner Nozzles

Right for spray angle, atomization, rated capacity. Large-capacity Monel strainer in nozzle makes cleaning a rare event.

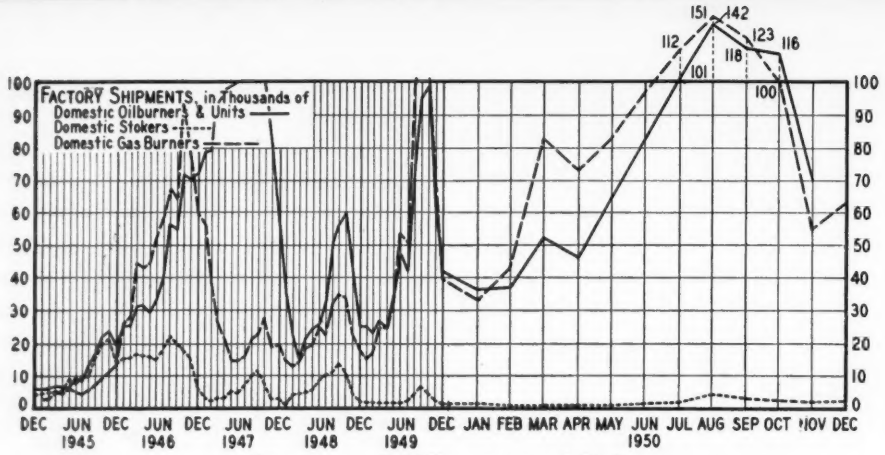
Visit Space 336 at the Show

Eddington Oil Burner Filters

Big in filter area, they do a thorough filtering job, need infrequent cartridge change.

EDDINGTON METAL SPECIALTY COMPANY

1050 Czarnecki Street, Eddington, Pa.

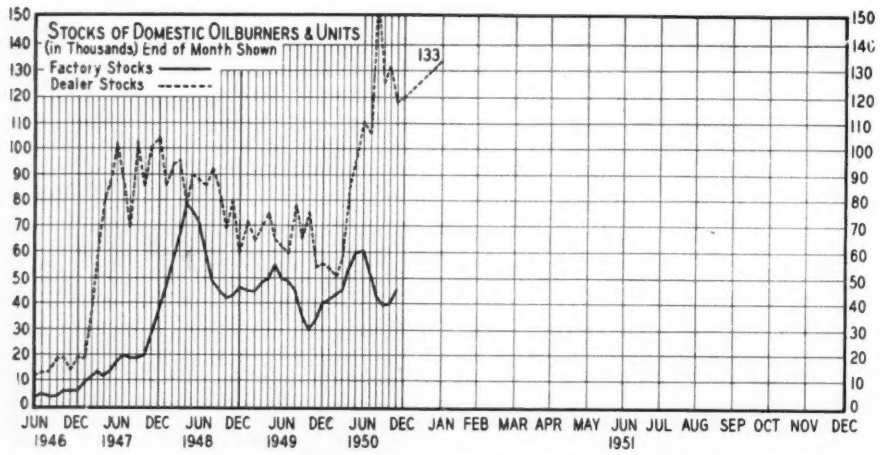


Shipments of Oilburners and Units

(Including Exports)

Adjusted to include manufacturers other than the 152 reporting to Census Bureau, FUELOIL & OIL HEAT's estimates of shipments are:

	NOVEMBER			ELEVEN MONTHS		
	1950	*1949*	*Percent Change*	*1950*	*1949*	*Percent Change*
Conversion	47,577	44,328	+ 7.3	624,484	416,173	+ 50.0
Boiler units	6,064	6,104	— 0.6	84,066	50,650	+ 65.9
Furnace units	16,594	10,530	+ 57.6	157,752	89,622	+ 76.0
All Domestic	70,235	60,962	+ 15.2	866,302	556,445	+ 55.6
Commercial	3,747	2,554	+ 46.7	32,173	23,524	+ 36.7
Total	73,982	63,516	+ 16.5	898,475	579,969	+ 54.9


STOCKS OF DOMESTIC OILBURNERS & UNITS
(in Thousands) End of Month Shown
Factory Stocks
Dealer Stocks
133
JUN DEC JUN DEC JUN DEC JUN DEC JUN DEC JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC
1946 1947 1948 1949 1950 1951

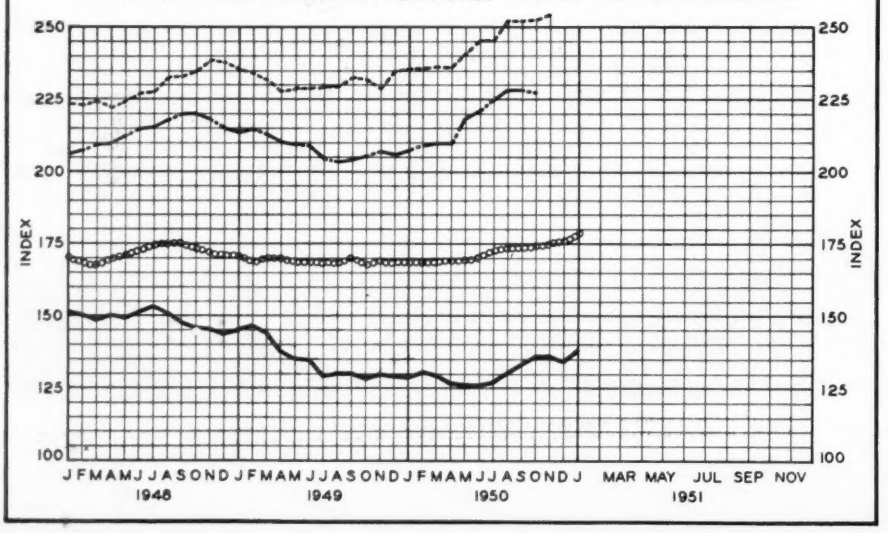
January Minimum Retail Prices: Key Dealers

	CONVERSION BURNERS	BOILER-BURNERS	FURNACE-BURNERS
January Aver.	$327	$673	$613
December Aver.	321	663	606

Price Index: Conversion Burners: January 1940 is 100%

WHOLESALE				RETAIL			
January	136.5	Six months ago	125.0	January	137.9	Six months ago	127.2
December	137.9	Year ago	127.6	December	135.3	Year ago	127.9

OILBURNER PRICES COMPARED TO GENERAL INDEXES


OILBURNER PRICES - RETAIL CONVERSION BURNER - JAN. 1940 = 100
INDIVIDUAL INCOMES - BUREAU OF LABOR STATISTICS - 1939 = 100
CONSTRUCTION COSTS - RESIDENTIAL - DEPT. OF COMMERCE - 1939 = 100
COST OF LIVING - BUREAU OF LABOR STATISTICS - 1935-39 = 100
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1948 1949 1950 1951

Oilheating Trends

JANUARY INSTALLATIONS of domestic oilburners and units are estimated at 39,971, a rise of 23% over 32,579 in the same month last year.

These installations were divided: New homes 12,452; Replacements of old oilburners 9,017; Conversions from other fuels 18,502. The high ratio of replacements is customary in January with most of the large dealer organizations giving them special emphasis in their sales.

BURNER STOCKS: Domestic oilburners and units in dealer stocks on February 1 were approximately 132,780 compared with 119,509 on January 1 and with 53,387 on February 1, 1950. There is every indication that dealers are building their inventories as high as they can afford to carry. Factory stocks on November 31, the latest available, were 45,931.

TANK STOCKS: Oilheating dealers had on hand February 1 approximately 100,070 customer tanks, a sharp rise from 76,130 a month earlier. Quite a number of the larger dealers had upward of 100 tanks in stock. The February 1 stocks were divided by sizes as follows: 220-275 gallon 86,358; 550-675 gallon 8,549; 1,000 and larger 5,163. The average tank price went up in January to $45 for the 275 gallon size, after holding an average of $44 through four months. Individual prices paid by dealers ranged from $36 to $65. There was a little variation in the average based on the size of the dealer's operation but not much. Dealers who installed less than 20 burners in January paid an average of $47 while those with larger operations paid a $44 average.

OIL-FIRED WATER HEATERS: At the request of a manufacturer a check was made this month on the number of separate domestic oil-fired water heaters. Based on the figures received from the reporting group it appears that there are in use in the country approximately 134,019 separate water heaters with gun or rotary burners. Then there are an additional 286,886 water heaters with vaporizing or pot-type burners. Separate water heaters are normally installed in

more people are reading about HEIL

Attention-compelling HEIL advertisements in consumer magazines will be telling millions of people about HEIL Automatic Heat. A new booklet, "179 Ways to Cut Your Heating Costs," will get many tributes for its timely helpfulness. Local co-operative newspaper campaigns reinforce HEIL's advertising program.

more people are buying HEIL

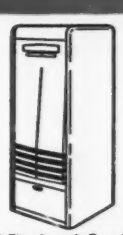
1950 was the biggest year ever in HEIL production. More and more people are aware of HEIL quality . . . of the advantages of undivided responsibility in heating equipment manufacture . . . of the superiority of the heating line that has consistently been a leader in the industry. More and more people are saying, "I'm glad we bought HEIL Automatic Heat."

more and more dealers are saying

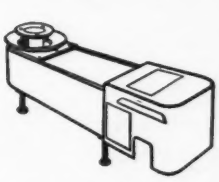
"I LIKE DOING BUSINESS WITH HEIL"

HEIL dealers sell one of the most complete lines of oil-fired and gas-fired heating equipment in the industry. They have a complete range of sizes and prices to offer. They have provable selling features that make HEIL's better quality obvious to their prospects. But more than that, they have a friendly, honest relationship with The HEIL Company that makes doing business in times like these a pleasure. When you do business with HEIL, you're not just a number in an account book. Write today and get complete details about a HEIL franchise.

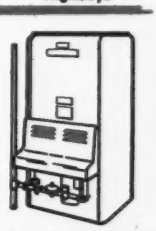
Oil-Fired and Gas-Fired Winter Air Conditioners



Oil-Fired and Gas-Fired Highboys



Oil and Gas Conversion Burners



Gas-Fired Gravity Furnaces . . . Oil-Fired Boilers

THE HEIL CO.

MILWAUKEE 1, WISCONSIN

District Offices: Hillside, Washington, D. C., Atlanta, Milwaukee, Detroit, Chicago, Minneapolis, Kansas City, Dallas, Los Angeles, Seattle

HILLSIDE, NEW JERSEY

fuelfoil oilheat

homes having warm air heating systems, so naturally their predominant market is in the Midwest, Far West and South.

FUELOIL STOCKS: Stocks of distillate fuels at refineries, terminals or in transit on February 3 in the area East of the Rockies were 45,898,000 barrels. This compares with 51,562,000 barrels on the corresponding date last year. The principal drop was on the East Coast where the comparison was 18,008,000 barrels this year and 23,728,000 last year. The colder winter naturally had an effect. In 12 East Coast cities the degree days to February 1 were 13% above those of last season. Then of course, there are nearly 15% more oilburners operating this year than last. The added fuel requirement in the East based on those two factors has been nearly 30%. No check was made this month of the bulk stocks of the fueloil distributors but there is not much reason to expect that they are particularly high. The price freeze has eliminated the speculative element, so the local marketers would not be stocking up for inventory profits.

BURNER REPLACEMENT PARTS: The table that follows shows the approximate number of replacement parts sold by dealers in 1950 to keep the existing oilburners operating. The figures seem large, but the final column showing the per cent that these parts represent of total burners in use indicates that they are relatively modest. These parts requirements will increase in future years at a faster rate than will be indicated by the total number of burners in use. This is due to the fact that the average burner age is increasing.

It is interesting to notice that in this whole group of parts replaced last year only about 42% were new products and the remainder had been rebuilt. The rebuilding of parts has become big business in the industry.

Oilburner and Building Permits

OILBURNERS					DWELLINGS			
January		12 MONTHS			January		12 MONTHS	
1951	1950	1950	1949		1951	1950	1950	1949
54	41	1094	698	Albany, N. Y.	..	..	..	..
306	517	4875	6173	Baltimore, Md.	443	221	2661	2885
..	..	..	..	Binghamton, N. Y.	3	1	150	106
..	..	..	..	Bloomfield, N. J.	3	7	342	81
..	409	..	6344	Boston, Mass.	12	32	319	348
81	73	1398	1065	Bridgeport, Conn.	..	..	..	..
..	..	..	..	Buffalo, N. Y.	32	27	650	431
1	2	34	95	Columbus, Ohio	..	..	..	..
..	..	..	..	Des Moines, Iowa	71	26	1638	1213
342	129	2282	6011	Detroit, Mich.	583	1109	11981	12064
48	41	878	597	Elizabeth, N. J.	5	12	63	54
45	16	530	379	Freeport, N. Y.	..	..	..	..
..	..	..	..	Greenwich, Conn.	37	25	406	240
..	..	..	..	Hackensack, N. J.	2	27	208	56
221	225	1535	1066	Hartford, Conn.	..	..	..	..
..	..	..	..	Hudson County, N. J.	..	..	..	..
14	16	552	340	Irvington, N. J.	2	0	51	25
..	..	..	..	Lynn, Mass.	10	14	171	204
74	70	565	448	Meriden, Conn.	..	..	..	..
93	185	3033	3769	Milwaukee, Wisc.	138	150	3611	2324
86	95	1056	1216	Minneapolis, Minn.	95	48	2057	1898
22	12	362	261	Montclair, N. J.	..	..	..	..
..	..	..	..	Morristown, N. J.	0	4	68	..
21	28	503	447	Mt. Vernon, N. Y.	..	..	..	..
..	68	..	1782	Newark, N. J.	..	..	..	..
19	103	947	689	New Bedford, Mass.	..	..	..	..
58	30	697	763	New Haven, Conn.	..	..	..	..
..	..	..	..	New Orleans, La.	..	..	..	..
44	33	423	322	New Rochelle, N. Y.	21	6	198	60
..	2247	35339	27364	New York City (total)	..	..	..	..
..	1601	28124	21146	Brooklyn-Queens	..	..	..	..
693	646	7215	6218	Manhattan, Bronx, Rchd	..	..	..	..
..	61	1399	1947	Norfolk, Va.	71	81	1359	841
..	..	..	..	Oakland, Calif.	..	..	..	..
..	57	1243	1628	Omaha, Nebr.	..	19	1479	716
15	4	289	206	Orange, N. J.	18	0	18	9
13	6	388	318	Passaic, N. J.	..	..	..	..
22	25	1047	768	Paterson, N. J.	9	8	218	123
915	508	14101	10731	Philadelphia, Pa.	..	..	..	..
..	..	..	..	Plainfield, N. J.	26	14	312	142
89	24	664	402	Portland, Maine	3	6	232	138
250	260	5998	6226	Portland, Oreg.	136	94	2490	2209
12	11	253	265	Poughkeepsie, N. Y.	..	..	..	..
90	64	803	674	Providence, R. I.	19	13	318	185
..	..	..	..	Reading, Pa.	3	9	79	65
97	76	1155	1079	Richmond, Va.	39	58	723	676
28	89	1148	..	Roanoke, Va.	..	..	..	..
141	99	3475	2426	Rochester, N. Y.	..	..	..	..
38	22	373	281	Rockville Center, N. Y.	11	6	197	114
29	30	603	376	Salem, Mass.	3	3	79	94
..	59	418	812	St. Louis, Mo.	37	37	969	598
109	129	2242	2157	St. Paul, Minn.	41	18	1640	834
71	85	674	567	Schenectady, N. Y.	..	..	..	..
..	..	..	..	Seattle, Wash.	150	114	2761	1690
..	..	..	..	Springfield, Mass.	29	16	764	562
62	96	968	575	Stamford, Conn.	..	..	..	..
..	17	..	668	Syracuse, N. Y.	14	32	591	355
..	..	..	..	Trenton, N. J.	2	1	64	70
..	..	..	..	Utica, N. Y.	5	3	175	85
108	124	2086	1426	Washington, D. C.	..	..	..	..
..	..	..	..	West Orange, N. J.	40	11	551	189
19	12	410	279	White Plains, N. Y.	9	6	239	108
80	70	1143	1139	Wilmington, Dela.	8	7	256	103
126	104	3146	1629	Worcester, Mass.	..	..	..	..
48	23	1074	655	Yonkers, N. Y.	..	..	..	..
4584	4123	135394	115633	Totals	2110	2242	40020	31895
+11.2		17.1+		*Percent Change*	—5.9		+25.5	

Burner Replacement Parts

Installed in 1950

	New	*Rebuilt*	*Total*	*Percent of Burners in use Jan. 1, 1950*
Motors	75,703	194,234	269,937	6.0
Pumps	112,749	193,325	306,074	6.8
Transformers	93,503	26,804	120,307	2.7
Controls	198,983	263,040	462,023	10.3

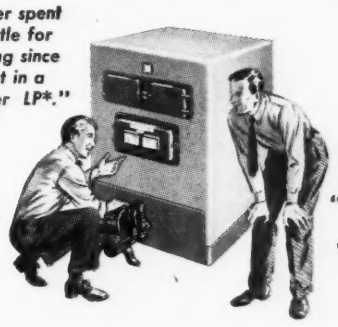
On the same basis, requirements for 1950 will be 15% greater.

DRIVER WAGES: Between the time of the oil price freeze of December 18 and the general wage freeze of January 25 about 47% of the reporting fueloil distributors made an increase in the hourly wage rate of their truck drivers. The average paid by this group who raised the wages had been

(*Please turn to page 175*)

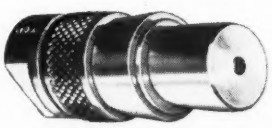
WINKLER USERS ARE WINKLER SALESMEN!

WINKLER
***LP**
***LOW PRESSURE OIL BURNER**



SEE THESE Exclusive WINKLER FEATURES at the OIL HEAT EXPOSITION

Booths 413-4-5-6
NAVY PIER, CHICAGO
APRIL 2-6

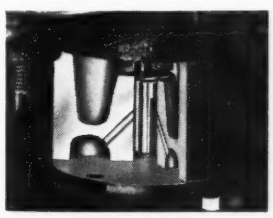


CLOG-PROOF NOZZLE
GUARANTEED 10 YEARS

Match this guarantee if you can! The Winkler Nozzle ends fuel waste—permits exact sizing of the burner to the heat requirements of the building.

FUEL METER ASSEMBLY
GUARANTEED 3 YEARS

Another Winkler stand-out. Intimately premixes oil and air—always meters the same amount of oil regardless of viscosity.



In 1950, the Winkler organization did the biggest business of its career!

The reasons for this are perfectly logical:

First, a completely outstanding product—proved in thousands of installations to do a better job of heating for less money. The Winkler LP* Oil Burner brings to top efficiency the *low pressure* principle of operation.

Second, an alert, aggressive group of dealers who made substantial profits themselves while increasing factory output.

Third, an *unpaid* sales force numbering tens of thousands. These are the *satisfied users* of Winkler Products! A Winkler LP* installation means an enthusiastic booster—and boosters mean sales!

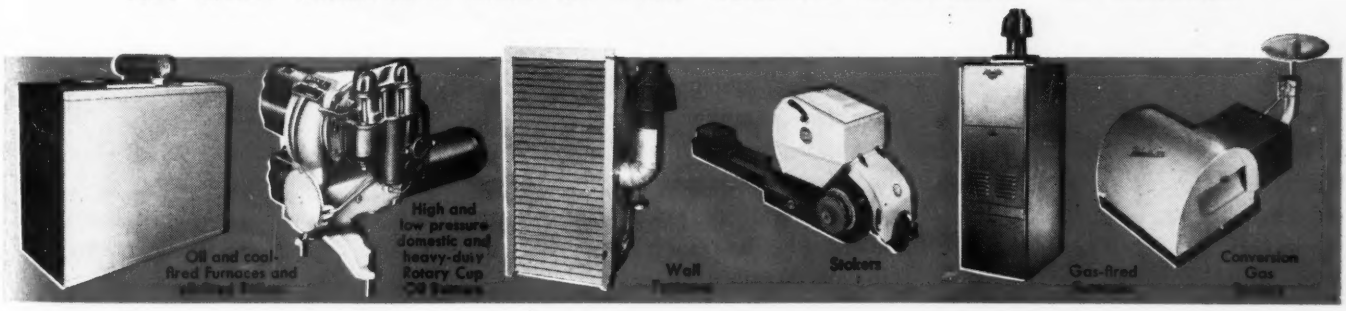
Fourth, a Winkler Merchandising Program which enables dealers to encourage and develop user-salesmanship to the utmost.

Fifth, a strong, nation-wide advertising program which pre-sells Winkler Products to the ultimate user.

Remember, too, that Winkler offers a Free Sales and Engineering Course for dealers in a new school building built especially for the purpose. Hundreds of Winkler dealers have attended—report prompt rise in sales.

Write now for information on how to join-up with this profit-making organization.

THE MOST COMPLETE LINE OF FINE HEATING EQUIPMENT IN AMERICA



Ask about the Winkler Free Sales Training School

WINKLER

Automatic Heating Equipment

U. S. MACHINE CORPORATION
Dept. H-31,
Lebanon, Indiana

fuelfoil oilheat

Government Influences on Fuels

by
Milburn Petty

WASHINGTON — Heating oil quality may be affected by the stepped-up refinery operations — more catalytic cracking — to supply the fuel requirements of military aircraft.

The same thing happened during the last war. This time, however, in addition to more aviation gasoline being needed there is also another demand to meet—jet fuel.

Jet-propelled planes are being used in increasing numbers. More and more are being manufactured; many more are planned for the years ahead.

Jet fuels, as pointed out recently by T. L. Apjohn of the Petroleum Administration for Defense, "will contain a substantial portion of components that normally go into kerosene, heating oil and diesel fuels."

So, the aircraft fuel requirements of the mobilization program may eventually impinge on the quantity as well as the quality of heating oils. Not this year particularly, unless there is an all-out war, but soon enough to plan accordingly.

Cites Effect of Jet Fuels

As to quality, Apjohn said:

"One effect of a high requirement for jet fuels is immediately obvious—a decrease in front end volatility of diesel and heating oils. To maintain supply, it is also obvious that there will be a trend toward higher end points."

With the higher distillation range will come a trend toward lower gravity, higher pour point, higher viscosity and higher sulfur content, he said.

May Increase Dealer's Costs

Apjohn's statements indicate that the fueloil dealer may face more trouble and increased operating costs, if ways and means are not available for offsetting the poorer quality heating oil that he hints may be in prospect.

For one thing, it may mean that more service calls will be necessary.

So, dealers may want to take this possibility into account when they come to write their contracts for the next heating season.

It might be advisable, too, for dealers to make sure that the Office of Price Stabilization is aware of the possible higher costs when OPS gets around to determining heating oil margins.

Gas to 'Supplement' Fueloil

Apjohn's speech also discussed gains in heating oil consumption between 1940 and 1950—nearly doubling in ten years—but said the rate of increase to 1953 would be "somewhat lower as a result of natural gas which will be available from pipe lines being constructed and projected for construction during the coming three years to supplement heating oil requirements."

This statement seems to confirm PAD's intentions to provide steel for new gas lines, despite growing opposition from the coal people.

Oil Price Orders Prepared

OPS (the OPA of this war) has worked up a series of price control regulations covering various segments of the industry, starting with crude oil.

Mostly, these orders are general rules, definition of terms, etc., just like the basic regulations issued by OPA, which form the patterns.

They will be tried out on industry advisory committees now being set up.

Fueloil Prices Are Included

One of these basic orders (similar to OPA 88) will cover sales of petroleum products in bulk. This will include sales of heating oils at retail, delivered by tankwagon. (Another order—patterned after OPA 137—will be limited to retail sales at service stations only.)

OPS plans to make use of the "reference seller" system used by OPA the last time on tankwagon sales.

One company in each territory is, in effect, designated as the "market leader" and its price postings are adopted by the price control agency as the official ceiling prices.

If the company selected does not now announce its price postings, officials point out that OPS could "request" that such company file its entire schedule which could then be made available to the public or published by the OPS.

Ultimately, Orville Judd (Ex-OPA), the oil price chief of OPS, hopes to spell out specific prices for crude and refined products in each area. Lists of such prices, as determined by OPS, would be compiled and published by the government agency. Admittedly, this is a huge task but officials believe that it is better than using trade journal quotations. Anyway, that is their present trend of thinking.

These specific price orders will allow OPS to relieve the margin squeeze in some areas that resulted from the quick freeze on prices.

Discuss Policies on Fuels

Senator O'Mahoney (D, Wyoming) starts off his investigation, preparatory to making recommendations on fuels policy, with a panel discussion scheduled for March 7, 8 and 9, under the resolution by Senator Myers (D. Penna.) who was defeated last fall.

Oil experts slated to participate include A. Jacobsen (Amerada), Dr. R. E. Wilson (Indiana Standard), B. A. Hardey (IPAA), L. F. McCollum (Conoco), Max W. Ball (Ex-OGD) and Warwick W. Downing (Colorado Oil & Gas Commission).

Limitation Orders on Steel

Officials of the National Production Authority say that orders are now being prepared which will limit the use of steel, copper and aluminum in the manufacture of oil-consuming devices such as automobiles, oil burners, etc. Just how deep a cut will be made in materials available for each type of such devices is not known now.

NPA plans an order soon—with PAD administering it—to supply steel to the oil and gas industries for maintenance, repairs and operations.

Gas Council to be Set Up

Interior Secretary Chapman is setting up a gas industry advisory council, separate from the National Petroleum Council, covering transmission and distribution but not production.

Gas matters will be handled by PAD, with an assistant deputy administrator heading up these activities. Temporarily, this post is held by R. H. Hargrove of Tennessee Gas Transmission Co.

fuel oil & oil heat

Chicago Convention to outline Future

Will consider oilheating Operations in a defense Economy

by
Bert Dunphy

THE 28TH ANNUAL CONVENTION and 19th National Oil Heat Exposition, being held by the Oil-Heat Institute of America, at Chicago April 2 to 6, promises to be the most eventful in years. One hundred exhibitors had contracted for space by March 1, a month in advance of the opening date, and hotel reservations were pouring in, reflecting the "grass roots" awareness of importance of the event.

The Exposition will be housed in Chicago's Navy Pier, 500 North on Lake Michigan, while convention and business sessions will take place in the Palmer House, State & Monroe Sts. Ralph Becker, managing director of OHI and director of the show, reveals that the Exposition is better than 75% sold out.

Overshadowing other subjects at the Convention business sessions will be the question of how the oilheating industry will operate in a defense economy. The program has been arranged to cover comprehensively the subjects that will best inform industry members what the situation means in facts that will assist them in shaping individual activities. It is probable that the future pattern of oilheating equipment manufacturing and distribution will be set at the meetings.

A. T. Atwill, *President*
Oil-Heat Institute of America

Among those urging universal participation, especially by dealers, is L. A. Casler, OHI Board member and executive vice-president of the Eureka Williams Corp. In a special statement, he stated, "It is impossible to exaggerate the importance of the Chicago OHI business sessions. It is extremely necessary for members of the industry who desire a square deal for it in the months ahead to participate during the convention in the final formulation of vital plans and policies."

Explaining that "a blueprint for the entire industry for many years to come may be established," Mr. Casler admonished all who have not made reservations or plans to attend are "making the business mistake of a lifetime if they do not do so before it is too late."

A preliminary survey of manufacturers to find out what will be new in the equipment displays at the Navy Pier indicates that products shown are apt to be "basic" models for a year or two. Most manufacturers' exhibits are to reflect the necessity for maintaining flexibility in the face of fast changing governmental regulations and will emphasize product improvement rather than completely new models.

The Exposition, devoted to the advancement of oilburning and allied industries, permits the showing of oil-fired and accessory equipment, including displays of research, manufacture, installation and use.

Registration for exhibitors will take place on Saturday, Sunday and Monday, March 31, April 1 and 2, in advance of the Show's opening; registration for trade visitors will begin at 4:00 P.M., April 2. The public is invited to

F. C. Haab, *Chairman*
Distribution Division
Oil-Heat Institute of America

P. K. Addams, *Chairman*
Accessory Division
Oil-Heat Institute of America

Ralph H. L. Becker, *Managing Director Oil-Heat Institute of America*

visit the Exposition. There is no charge, nor is registration required.

The "Handbook of Oil Burning," all new edition prepared by the Institute, will be on display at Chicago and, to help celebrate its availability, a free copy will be given to every 100th trade registrant. Lucky winners will be determined by random pick from among each day's registration cards and their names will be posted daily in the OHI booth. Multiple registrations are discouraged and, in any such cases only the first registration will count.

Burning Oil Distributors Association and Chicago Oil Burner Associations, both Chapters of the Distribution Division of OHI, are actively promoting public attendance at the Exposition. F. C. (Ted) Caldwell, secretary of both groups, expressing the pleasure of the Associations in welcoming the Show and Convention back to Chicago, accepted the events as a real stimulus to local oilburner sales and to impress present users with the wide popularity of oil heat. He indicated that a substantial fund was being subscribed by members for advertising the Exposition to the public.

During the morning of April 2 will be held the first business sessions of the Convention. The OHI Show Committee meets at 9:00 A.M., followed by a meeting at 10:00 A.M. of the retiring OHI Board of Directors. Paul K. Addams, chairman of the Accessory Division, will preside at the Division's annual meeting at 1:30 P.M., April 2, with the retiring Board of Directors of the Distribution Division meeting at the same time.

The Exposition officially opens at 4:00 P.M., April 2, preceded by opening ceremonies. It remains open that day until 10:00 P.M. It opens on the four other days of the week at 1:00 P.M., remaining open again until 10:00 P.M. on Tuesday and Wednesday, April 3 and 4, closing at 5:00 P.M. on Thursday, April 5 to permit attendance at the annual banquet, and closes finally at 8:00 P.M., Friday, April 6.

Continuing the Convention sessions, Fred C. Haab, chairman of the Distribution Division, conducts its annual meeting at 9:00 A.M. on Tuesday, April 3, with the annual meeting of the Oil-Heat Institute of America scheduled immediately thereafter at 10:00 A.M. President A. T. Atwill will act as chairman, and supervise the election of new officers and directors. Following the proceedings the new Board of Directors will meet at lunch.

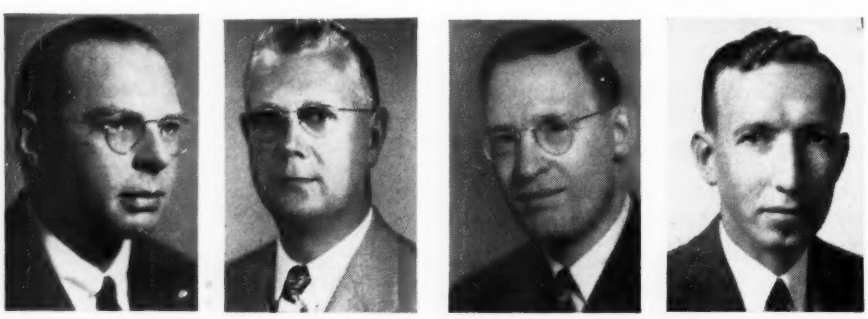
An afternoon Engineering Session also is to be held on Tuesday, the first of three open sessions at which outstanding speakers are to appear. L. N. Hunter, vice-President, National Radiator Co. and chairman of OHI's Engineering Committee, will conduct the meeting. Speakers are to be: H. C. Hunter of the Gulf Oil Corp., who will talk on "Fueloils today and tomorrow"; Glenn Seidel, Minneapolis-Honeywell Regulator Co., on "The purposes of field engineering"; Howard F. Hinst, Babcock & Wilcox Tube Co., who will discuss the "Care of tubes in oilfired boilers"; B. A. Landry, Batelle Memorial Institute, who will tell about "Needed research in oilburning." Rounding out the panel of six speakers will be: J. A. Stein, Bacharach Industrial Instrument Co., whose paper will cover "Combustion products and smoke" and D. W. Locklin, Timken Silent Automatic Div., delineating on "Progress in evaluating fueloils."

Two of the speakers *at the Industry Day Session, April 4, left to right: J. Howard Marshall and T. A. Crawford. George Hoffman and Edward McFaul also will appear.*

Tuesday evening has been set aside by The Old Timers' Club for its annual Jamboree, for which a committee has been overworking itself to match the highlights of the memorable dinner-meeting held three years ago in Chicago. More complete details are contained in a separate item on page 69.

Wednesday, April 4 has been designated "Industry Day," featured by a 9:30 A.M. session, at which President A. T. Atwill will act as chairman. Four speakers are scheduled, headlined by T. A. Crawford, vice president and general manager, Timken Silent Automatic Div., who will outline the work of "The Industry's Government Committee," of which he is chairman. Members of the Committee were named at the last meeting of the OHI Board of Directors to represent the entire industry in contacts with government officials whose responsibilities can affect the oilheating business at all levels.

Remaining speakers on this meet-



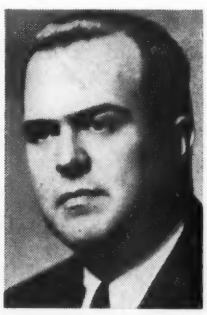
Speakers *at the Dealer Day Session, April 5, left to right: John R. Sherwood, C. T. Burg, C. R. Jonswold and Robert Gray.*

Left: *Charles G. Wright, speaker at the Accessory Division luncheon, April 4.*
Right: *E. N. McDonnell, toastmaster of the Annual Banquet, April 5.*

ing's program include: J. Howard Marshall, vice chairman Ashland Oil & Refining Co. and consultant to the Petroleum Administration for Defense, whose talk is to cover the broad oil and government oil picture; George Hoffman, consultant to the Plumbing and Heating Section, Material Controls Division, National Production Authority, who will explain the scope of his work and Edward McFaul, consultant to General Motors, and an expert in the field of public business and government relations.

The successful Accessory Division luncheon inaugurated last year is to be repeated this year, and will take place at 12:30 P.M. on April 4, after the Industry Day session. Chairman Paul K. Addams of OHI's Accessory Division will preside. Charles G. Wright, well-known Chicago business economist and author, has been engaged as speaker. Mr. Wright has been business economist at the Federal Reserve Bank of Chicago for the past four years, an

(*Please turn to page 69*)



Left: *J. W. Owens, vice president, OHI, in charge of arrangements for the Ladies Entertainment program, and national chairman, Old Timers' Club.*
Right: *L. N. Hunter, chairman, OHI's Engineering Committee, who will conduct the Engineering Session, April 3.*

Program

Exposition: Navy Pier—Meetings: The Palmer House
April 2 to 6, Chicago

MONDAY, APRIL 2

9:00 A.M.—OHI Show Committee Meeting.
10:00 A.M.—Retiring OHI Board Meeting.
1:30 P.M.—Annual Meeting, Accessory Div., P. K. Addams, *Chairman.*
1:30 P.M.—Retiring Board Meeting, Distribution Division.
4:00 P.M.—Opening ceremony, 19th National Oil Heat Exposition.
10:00 P.M.—Exposition closes.

TUESDAY, APRIL 3, "ENGINEERING DAY"

9:00 A.M.—Annual Meeting, Distribution Division, F. C. Haab, *Chairman.*
10:00 A.M.—Annual Meeting, OHI of America, A. T. Atwill, *Chairman.*
12:30 P.M.—New OHI Board of Directors, Luncheon Meeting.
1:00 P.M.—Exposition opens at Navy Pier.
2:00 P.M.—Engineering Session, L. N. Hunter, *Chairman.*
Speakers: H. C. Hunter, Gulf Oil Corp.:
"Fueloils today and tomorrow"
Glenn Seidel, Minneapolis-Honeywell Regulator Co.:
"The purposes of field engineering"
Howard F. Hinst, Babcock & Wilcox Tube Co.:
"Care of tubes in oilfired boilers"
B. A. Landry, Batelle Memorial Institute:
"Needed research in oilburning"
J. A. Stein, Bacharach Industrial Instrument Co.:
"Combustion products and smoke"
D. W. Locklin, Timken Silent Automatic Div.:
"Progress in evaluating fueloils"
2:30 P.M.—New Distribution Division Board of Directors Meeting.
7:30 P.M.—Annual Dinner and Entertainment, Old Timers' Club.
10:00 P.M.—Exposition closes.

WEDNESDAY, APRIL 4, "INDUSTRY DAY"

9:30 A.M.—Industry Session, A. T. Atwill, *Chairman*
Speakers: T. A. Crawford, Timken Silent Automatic Div.:
"The industry's Government Committee"
J. Howard Marshall, Ashland Oil & Refining Co. and consultant to Petroleum Administration for Defense:
"The broad oil and government oil picture"
George Hoffman, Plumbing and Heating Section, Material Controls Division, National Production Authority.
Edward McFaul, General Motors Corp.:
"You've got to get along with people to get along"
12:30 P.M.—Accessory Division Luncheon, P. K. Addams, *Chairman.*
Speaker: Charles G. Wright, Federal Reserve Bank of Chicago.
"The Economics of Mobilization"
1:00 P.M.—Exposition opens at Navy Pier.
5:00 P.M.—Chapter Secretaries, Distribution Division, Dinner Meeting.
10:00 P.M.—Exposition closes.

THURSDAY, APRIL 5, "DEALER DAY"

9:30 A.M.—Dealer Session, F. C. Haab, *Chairman.*
Speakers: John R. Sherwood, Sherwood Bros.:
"Cooperation in competition with natural gas"
C. R. Jonswold, Arrow Petroleum Co.:
"Fueloil supply and problems for 1951"
C. T. Burg, Iron Fireman Mfg. Co.:
"Beware of the three bad bogeymen"
Robert Gray, editor, FUELOIL & OIL HEAT:
"Looking ahead at oilheating"
1:00 P.M.—Exposition opens at Navy Pier.
5:00 P.M.—Exposition closes.
6:00 P.M.—General cocktail hour.
7:30 P.M.—Annual Banquet and Entertainment, E. N. McDonnell, *Toastmaster.*

FRIDAY, APRIL 6

1:00 P.M.—Exposition opens at Navy Pier.
8:00 P.M.—Exposition final closing.

List of Exhibitors*

National Oil Heat Exposition

Navy Pier, Chicago
April 2-6, 1951

Space No.

Ace Engineering Co. (106)
Attending: J. W. Cowan, R. W. Bardach, Jr., A. F. Jelenc, I. Schurman.
Exhibiting: Horizontal rotary oilburners for Nos. 5 and 6 fueloil.

Acme Electric Corp. (458)

Airtemp Division (462–3)
Attending: C. S. Stackpole, W. B. Magill, M. J. Leonard and Chicago Regional Personnel.
Exhibiting: Conversion Oil Burners, Oil Fired Boiler and Furance-Burner Units, Year 'Round air conditioning.

Aldrich Co. (225–7)
Attending: P. M. Stephenson, B. Mulder, E. L. Fox and representatives.
Exhibiting: Special, Bantam and Series B oilfired boiler-burner units, conversion oilburners.

American Artisan (327)
Exhibiting: Publication.

American Clay Forming Co. (125)
Attending: Ben Fogelman, Ross Stoffer, Paul Buckles.
Exhibiting: Combustion chambers.

American Radiator & Standard Sanitary Corp. (150–1–2)

Anchor Division (214)

Armstrong Machine Works (464)

Automatic Devices Co., Inc. (467)
Attending: H. T. Kucera, O. W. Dobson, E. A. Hartnett and sales agents.
Exhibiting: Weather-Man outdoor controls.
New Product: New type hot water indoor-outdoor control unit.

Bacharach Industrial Instrument Co. (402)
Attending: John W. Smith, George R. Gardner.
Exhibiting: FYRITE combustion testing kits, including the Utility Kit, of which the TRUE-SPOT smoke tester is a part; FloRite direct reading velocity meter; TEMPSCRIBE temperature and operation recorders; sling psychrometer; vaporizing burner testing kit.

Robert Barclay, Inc. (434–5)
Attending: Milton K. Arenberg, Laurence Felker, Barton Geldigan, Richard Collins, Emerson Spires, Dan Collins, L. X. Frost.
Exhibiting: Oilburner supplies.
New Products: "Two-Tank-T" oil filters; new oil tank valves.

Bell & Gossett Co. (259–60)
Attending: E. J. Gossett; C. E. Pullum, R. E. Moore, Ralph Patterson, W. A. Boone, Frank Hackett.
Exhibiting: Hot water heating specialties.
New Products: Comfort Control system, outdoor type temperature control.

Breuer Electric Co. (160)
Attending: A. A. Breuer, P. M. Williams, A. R. Grant, John Hill, E. Frahm, A. M. Anderson.
Exhibiting: Furnace and boiler vacuum cleaners; portable electric blowers.

Space No.

Burnham Corp. Boiler Division (357–9)
Attending: V. A. Good, H. N. Jones, F. R. Brophy, D. W. Stevens, R. W. Fowler.
Exhibiting: Base-Ray radiant baseboard, Pacemaker and Yello-Jacket boiler-burner units.
New Product: Pacemaker wet-base series.

Burning Oil Distributors Association (400)

Century Engineering Corp. (444–5–6)
Attending: B. J. Lattner; J. O. Rosche, Jack Stites, Ray F. Considine.
Exhibiting: Oilburners, oilfired boiler and furnace-burner units.
New Product: Oilfired gravity furnace unit.

Chicago Oil Burner Association (400)

Cleaver-Brooks Co. (442–3)
Attending: J. V. Resek; H. McCoy.
Exhibiting: Cleaver-Brooks industrial and commercial Hev-E-Oil burners.

Cole-Sewell Engineering Co. (115)
Attending: E. W. Laudert, H. J. Sewell, S. H. Burt.
Exhibiting: Cole Draft Governors and Draft Korektors.

Combustion Control Corp. (257)
Attending: J. A. Long, B. E. Shaw, L. D. Sibley, S. J. Pachyn, H. Christiansen.
Exhibiting: Industrial and commercial flame failure safeguards and controls, including standard Fireye combustion safeguards and Fireye programming control for automatically ignited gas and oilburners; flame failure safeguard system for manually and semi-automatically ignited gas and oilburners; multiple scanner flame failure control for gas and oilburners, featuring new Firetron flame scanner.
New Products: Firetron, photo-conductive cell flame scanner; Fireye smoke indicator.

Combustioneer Division (208)
Attending: George Roudanez, E. M. May, C. L. Brooks, D. L. Getz, R. O. Hedges, R. F. Kissel, P. H. Chamberlain, V. C. Page, H. E. Gohnz.
Exhibiting: Low pressure oilburner, Hi-Boy and winter air conditioning oil furnace, Combustioneer humidifier.
New Product: Low pressure oilburner.

Commercial Filters Corp. (427)
Attending: J. R. Chisholm, H. C. Corwin, P. R. Matravers, G. Paul Huntley.
Exhibiting: FULFLO fueloil filters.
New Products: Models BRM2 and BRM3, filters for use on water lines leading to spray nozzles of air conditioning systems.

Delavan Mfg. Co. (157–8)
Attending: Nelson B. Delavan, David T. Morgenthaler, Eugene O. Olson, H. L. McNally.
Exhibiting: Delavan oilburner nozzles and accessories, sludge solvent, Hally nozzle filters.

Space No.

Delco Appliance Div. (305)
Attending: A. C. Freimann, J. F. Warren, Stuart J. Rice, Jr.
Exhibiting: Conversion oilburners, oilfired boilers and conditioners.

Dielectric Products Co. (124)
Attending: H. T. Carey, Phil Krueger.
Exhibiting: Oilburner electrode assemblies, bus bars and high tension cable assemblies.

Dole Valve Co. (453–4)
Attending: J. F. Lund, H. Aronson, W. Pennington, S. G. Phillips, Stewart Singers.
Exhibiting: Air and vacuum valves, flow controls, automatic hot water valves, water mixers, thermostatic air controls.
New Products: Automatic hot water air valves No. 20; chamber vents.

Domestic Engineering (153–4)
Exhibiting: Publication.

Dongan Electric Mfg. Co. (126)
Attending: Lyle J. Hicks, K. I. Clisby, C. E. Hicks, J. B. Evans.
Exhibiting: Ignition transformers.

Eddington Metal Specialty Co. (336)
Attending: Wesley Czarnecki, Walter Czarnecki, Casimer Czarnecki, Stanley Czarnecki, Vincent E. Devine, Walter B. Stamberger.
Exhibiting: Nozzles, filter, strainer, inspection mirrors, service kits.
New Product: Model S-254 filter.

Electrol Burner Mfg. Co., Inc. (145–6)
Attending: R. F. Andler, L. W. Schroeder.
Exhibiting: Electrol oilheating equipment.

Enterprise Engine & Machinery Co. (137)
Attending: P. I. Birchard, V. M. Douglas, C. A. Louderback, J. N. Brophy.
Exhibiting: Combination oil-gas burner, P. D. metering pump.

Field Control Division (130)
Attending: C. W. Potter, Lee Beardsley, Earle Smith, Fay Kinne, Russell Glass, George Peterson.
Exhibiting: "M", "R" and Scotty Field barometric draft controls.

Fitzgibbons Boiler Co., Inc. (431–2–3)
Attending: Paul K. Addams, John R. Collette, G. B. Olson, G. Nelligann, M. F. May Associates.
Exhibiting: 200 & 400 boiler-burner units, Eighty & RZU Jr. series boilers.

Fluid Heat Division (249)

Fram Corporation (105)
Attending: E. L. Sandberg.
Exhibiting: Domestic oilburner filters and cartridges.

Fueloil & Oil Heat (118–9)
Attending: Robert Gray, A. G. Winkler, Lee Steedle, H. J. Hannigan, Bert Dunphy, J. W. Schulz, A. C. Esser.
Exhibiting: FUELOIL & OIL HEAT magazine, Beacon Boiler Reference Book, Beacon Radiation Reference Book, 1951 Specifications Book of Oilburners and Fueloil, The Selling Man, Basic Service Text for Pressure Burners, Oilheating Handbook and reprint booklets: Fueloil Handling, Heading Off Trouble, Installing the Domestic Oilburner, Low Pressure Burners, Oilheating Snags, Vaporizing Burner Service, Wall Flame Rotary Oilburners.

Fuel Oil News (104)
Exhibiting: Publication.

*As of March 1.

Space No.

General Automatic Products Corp. (107–8–9)
Attending: C. W. Schaefer, C. E. Birch, H. J. Hughes, R. E. Lee, H. F. Browning, C. E. Hight.
Exhibiting: Conversion oilburners, oilfired boilers and winter air conditioners, "Floorlevel" baseboard radiation.
New Product: "E" series boiler.

General Electric Co. Air Conditioning Dept. (220)
Attending: W. L. Sneltjes, C. R. Olsen, R. P. Schaeffer, E. E. Burritt, E. V. Whiteley, H. L. Beurle, I. P. Sharpe, G. W. Hart, R. H. Stearns, A. C. Ketschmar, J. G. Mooney, A. K. Tower.
Exhibiting: Oilfired boilers and furnaces.
New Products: Clock thermostat, automatic air-wall register, year-round air conditioner.

General Electric Co. Apparatus Dept. (264)
Attending: C. J. Ossenfort, F. A. Ondrovick, C. J. Monroe, B. S. Day, L. R. Spicer, B. A. Feldman, L. R. Brickey.
Exhibiting: Domestic oilburner controls with automatic recycling, commercial controls, fractional horsepower motors, 4-SM ignition transformers.

General Filters, Inc. (244)
Attending: Mrs. Grace Redner, Roland A. Redner, Robert G. Gregory, William B. Forrest, L. E. Schulein, T. C. French, Gene Granse, Steve Dunn, V. B. Kathe.
Exhibiting: Line of General fueloil filters.

Space No.

Gilbert & Barker Mfg. Co. (417–8–9)
Attending: J. A. MacDonnell, H. J. Lanyon, H. K. Ricker, R. B. White, E. J. Walters, D. F. Gray, G. B. Baan, W. N. Heseltine, L. A. Doremus.
Exhibiting: Gun type and rotary heavy oilburners, boiler-burner units, surface and suspended oilfired furnaces.

Gulf Oil Corp. (127–8)
Attending: Charles E. Kramb, Arthur V. Harris, Lyle A. Devlin.
Exhibiting: Gulf Solar Heat, branded dealer program.
New Product: Gulf Solar Heat fueloil.

Harvey-Whipple, Inc. (133–4–5–6)
Attending: Ray G. Whipple, T. A. Hodgdon, Ben Church, Leon Turner, Lowell Meinerz, Lee Shaw, Bill Dee, A. E. Brown.
Exhibiting: Master Kraft oilheating equipment.
New Products: Portable heater on wheels; packaged boiler units.

Heil Company (216, 316)
Attending: J. F. Heil, H. F. Pugh, W. E. Simons, A. Meyer, George Hochstein, Roy King, Herman Wagen, Fred Brubaker, D. Cunningham, Karll Mould, D. E. Fricker, K. F. Johnson, J. F. Heil, Jr., William Chester, Jr.
Exhibiting: Oilfired domestic heating equipment.

Hoover Co. (141)
Attending: A. E. Ott, C. P. Williams.
Exhibiting: Electric motors.

Space No.

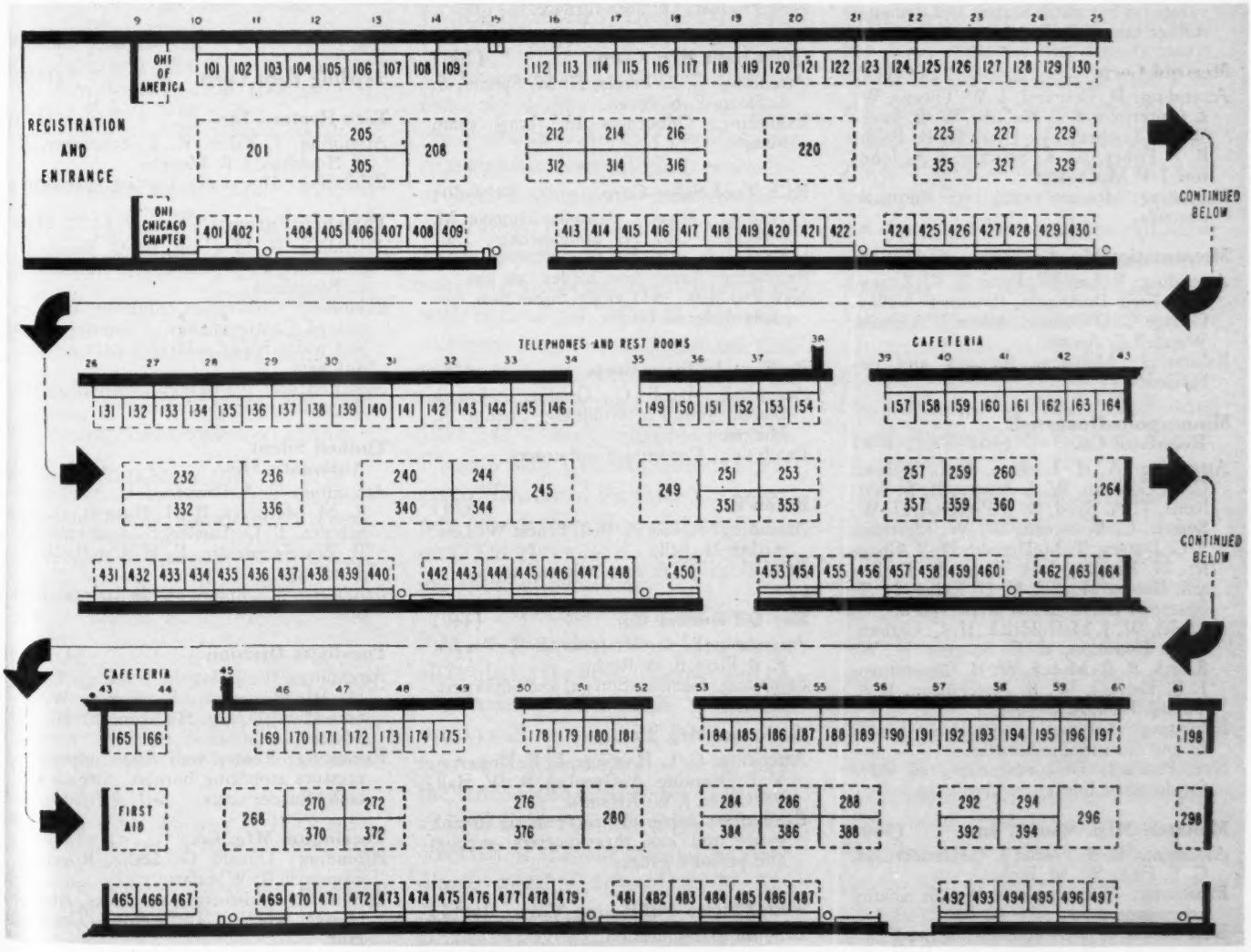
Iron Fireman Mfg. Co. (201–2–3 301–2–3)
Attending: C. T. Burg, Dale Wylie, H. M. Cutshaw, S. H. Kibbe, Howard E. Evans.
Exhibiting: High pressure domestic oilburners, including Vortex models; oilfired boiler and furnace-burner units; horizontal rotary oilburners; commercial-industrial oil-gas burner.

Jackson & Church Co. (205)
Attending: C. W. Stuart, L. S. Redford, F. C. Adams, C. J. Low, A. E. Duwe, J. B. Winston.
Exhibiting: Oilfired Poweraire and suspenson furnaces.

Jefferson Electric Co. (122)
Attending: C. T. Hartnett.
Exhibiting: Oilburner ignition transformers.

S. T. Johnson Co. (101–2–3)
Attending: J. C. Johnson, R. P. Johnston, A. Dimick, W. Thoms, W. Lees, W. S. Harlacher.
Exhibiting: Conversion oilburners, combination gas-oilburners, oilfired boiler and furnace-burner units, oilfired water heaters.

Kent Co., Inc. (149)
Attending: C. E. Clifford, Joe W. Jones, George Davis.
Exhibiting: Kent double suction furnace and boiler cleaner.
New Products: Cover clamp to speed emptying; convenience outlet for plugging extension light into the base of the cleaner.



Space No.

Kewanee Boiler Corp. (251–3)
Attending: J. M. Hartman, Earl Thompson, Grover Zang, Ralph E. Sjoberg, C. F. Olsen, W. E. Foskett, R. E. Wicklander, Pete Irwin, J. W. Carr, Fred R. Desidero.
Exhibiting: Oilfired boilers.

Klemm Automotive Products Co. (129)
Attending: E. R. Klemm, Jr., C. B. Wilson, Al Gruelich, Gerry Wieland, Robert Smiley.
Exhibiting: Fueloil filters.

Ko-Z-Aire, Inc. (138–9)
Attending: J. J. Hildebidle, R. T. Demarest, D. Banner, D. Porter, G. Johnson, L. Krause, L. White, M. Taylor.
Exhibiting: Oilfired warm air furnaces.
New Product: Counterflow furnace.

H. C. Little Burner Co. (175)

Lynn Products Co. (457)
Attending: Edwin K. Priest, Lawrence H. St. Jean.
Exhibiting: Conversion oilburners, domestic and semi-industrial.
New Product: Spiral-Ex combustion head.

McDonnell & Miller (447–8)
Attending: E. N. McDonnell, Nils W. Swanson, George LaRoi, Leo Kmieckk, John James, Charles Bottger, Dick Flickinger, Gene Eggers, J. W. Ramsay, Howard Peary, Parker Devlin.
Exhibiting: Safety devices for steam and hot water boilers.
New Product: Full line of safety relief valves for hot water heaters and domestic storage tanks.

Mercoid Corp. (421–2)
Attending: H. Courteol, J. W. Owens, W. L. Colterjohn, I. E. McCabe, W. E. Jones, W. L. Lischett, W. Ufer, G. R. Folds, R. F. Fisher, W. K. Stauffer, J. A. Johnson, J. F. McCauley.
Exhibiting: Mercury switch type automatic controls.

Metromatic Mfg. Co. (142–3–4)
Attending: Robert W. Pyne, B. W. Cosentino, Fred DeAngelo, Frederick Nalley, George C. O'Connor, Albert J. Axtman, Wendell F. Austin.
Exhibiting: Metropac furnaces and oilburners.

Minneapolis-Honeywell Regulator Co. (404–5–6–7–8–9)
Attending: A. H. Lockrae, K. L. Wilson, C. C. Cochran, W. J. Brown, H. E. Williams, T. A. Reed, D. J. Peterson, H. W. Sweatt, C. B. Sweatt, W. W. Martenis, J. C. Dorsey, T. McDonald, H. E. Chapler, N. Rutgers, Jack Tracy, H. D. Bissell, George Hoeffel, G. G. Keller, H. T. Sparrow, Steve Crum, John Wilson, G. Seidel, W. J. McGoldrick, H. C. Carlsen, L. L. Hamilton, E. K. Scoggin, K. W. Schick, R. R. Moore, W. H. Christensen, J. B. Daniels, W. B. Hutchinson, J. A. Young, Howard Snyder.
Exhibiting: Automatic controls for domestic and industrial oilburners.
New Product: Delayed-opening oil valve for domestic burners.

Monarch Mfg. Works, Inc. (360)
Attending: E. P. Frame, J. C. Underwood, C. E. Fink, W. M. Fink.
Exhibiting: Oilburner nozzles, air mixing equipment.
New Product: G-81 combustion head.

Space No.

Morse-Smith-Morse, Inc. (116)
Attending: Robert E. Chase, John C. Dieselman.
Exhibiting: FIROMATIC safety valves, tank gauges, filters, vent caps and thermal switches.

Oil-Heat Institute of America (100)

Penn Electric Switch Co. (455–6)
Attending: R. V. Clark, Carlos Morgan, H. C. Shilling, R. Fletcher, E. A. Price, E. B. Maire, J. C. Moravec, R. H. Luscombe, F. X. Fessler, A. W. Barr, Jud Forbes, D. W. Cash, R. S. Penn, George Sander, R. L. Ratliff, R. L. Persons, A. L. Rubel, H. O. Gray, M. E. Henning, Emile Tassin, Adolph Korte.
Exhibiting: Automatic heating controls.
New Product: Type 443 dual liquid expansion immersion control.

Perfex Corp. (428–9–30)

Preferred Utilities Mfg. Corp. (112–3)
Attending: R. S. Bohn, W. H. Bohn, J. S. Kaplan, W. C. Schneider.
Exhibiting: Commercial and industrial oil, gas and combination gas-oilburners, oilburning controls and specialties.
New Product: Combination gas-oilburner unit.

Quaker Mfg. Co. (401)
Attending: O. J. Long, O. B. Nelson.
Exhibiting: Oil space heaters and floor furnace.
New Product: Oil floor furnace.

Quiet-Heet Mfg. Corp. (140)
Attending: S. L. Peters, H. M. Spitzer, S. L. Sloan, E. N. Sloan.
Exhibiting: Oilburners and brass sump pumps.

RCS Tool Sales Corp. (459–60)
Attending: Francis Russell, Thomas M. Sweeney, Carl A. Longanecker, Dale Davis.
Exhibiting: Super Saw, blades and kits.
New Products: 1951 model Super Saw, specially-designed blades.

Radiant Utilities Corp. (436)
Attending: Jacob G. Goldberg, Joseph Bloom, Julius S. Goldberg, Arthur A. Marcus.
Exhibiting: Conversion oilburners.

Rajah Co. (123)
Attending: Robert A. Bell, Ernest W. Law, Arthur H. Bell.
Exhibiting: Rajah terminals and tools.

Ray Oil Burner Co. (440)
Attending: R. C. Westover, J. C. Draper, R. B. Plass, R. A. Rothe.
Exhibiting: Combination gas and oilburners.

Rochester Mfg. Co. (450)
Attending: C. L. Hastings, L. E. Donavon, V. E. Dunning, A. Greulich, R. W. Hall, W. Chase, J. W. Kershaw.
Exhibiting: Universal direct reading oil tank gauge, test kits, thermometers, vacuum and pressure gauges.

Scott-Choate Publishing Co. (114)
Exhibiting: Publication.

Space No.

Scully Signal Co. (314)
Attending: F. P. Scully, C. A. Goddard, A. F. Gray, W. G. Rowell, J. Urbain, E. Murphy.
Exhibiting: VENTALARM fill signals, combination VENTALARM gauge, Scully gauge, FASFILL connectors, REMOTAMATIC control.
New Product: REMOTAMATIC control.

Shell Oil Co., Inc. (344)
Attending: J. L. Minner, C. M. Mockler.
Exhibiting: Shell fueloil with FOA-5X.

Snips Magazine (169)
Exhibiting: Publication.

Sparkler Mfg. Co. (121)
Attending: F. W. Leuthesser.
Exhibiting: Fueloil filters.

Sundstrand Engineering Co. (420)
Attending: R. H. Gustafson, E. M. Smith.
Exhibiting: Domestic conversion oilburners.

Sundstrand Machine Tool Co. (325)
Attending: B. F. Olson, L. H. Schuette, C. W. Lang, R. J. Murphy, B. L. Douglass, J. F. Nelson, J. F. Griffey, O. E. Mayfield, R. E. Stevens, W. R. Kiefer, F. J. Kammeraad.
Exhibiting: Oilburner pumps and fuel units.
New Products: Model J, single-stage and model K, two-stage fuel units, with and without solenoid valves.

Sun-Ray Burner Mfg. Corp. (424–5–6)
Attending: Gabe M. Marin, Alfred Luft, Martin Sones.
Exhibiting: Conversion oilburners.

Super Electric Products Corp. (437)

Swirling Heat Corp. (159)

Taco Heaters, Inc. (117)
Attending: J. Balter, R. T. Schoerner, E. T. Houlihan, J. R. Murphy.
Exhibiting: Hot water heating specialties.

Thatcher Furnace Co. (212, 312)
Attending: R. M. Cook, M. C. Beard, D. J. Turner, F. W. Sieffert, J. C. Meehan, L. Baughman.
Exhibiting: Conversion oilburner, V-Series oilfired Comfortmaster, Oilmaster steam and water boiler, oilfired winter air conditioners.
New Product: 503 oilfired Counterflow Hi-Boy winter air conditioner.

Timken Silent Automatic Div. (232, 332)
Attending: T. A. Crawford, C. A. Cooper, R. M. Marberry, E. H. Haugen, G. W. Schultz, T. O. Lawler, R. Bodenner, A. P. Wandschneider, E. H. Cahill, V. R. Sandberg.
Exhibiting: Complete residential oil heat line.

Toridheet Division (351–3)
Attending: W. J. Smith, Jr., R. J. Lucas, D. W. Rouse, L. F. Dienst, W. F. Schickler, D. E. Hildebrecht, H. M. Soyster.
Exhibiting: Rotary wall flame oilburners, pressure atomizing burners, furnace and boiler-burner units.

Torrington Mfg. Co. (438–9)
Attending: Donald G. Leslie, Roger T. Lyman, F. R. Wheelan.
Exhibiting: Airistocrat fan blades, Airotor blower wheels, Torrington "Coasting Hub."

Space No.

Turb-O-Tube Furnace, Inc. (166)
Attending: H. J. Carmichael, J. B. W. Carmichael, Don Carmichael, A. H. Dann.
Exhibiting: Oilfired forced air furnaces.

Tuthill Pump Co. (120)
Attending: H. T. Kessler, W. J. Wagner, J. D. Young.
Exhibiting: Oilburner fuel units and industrial oilburner pumps.
New Product: Heavy oil auxiliary motor-pump units.

U. S. Machine Corp. (413–4–5–6)
Attending: Claude A. Potts, Walter E. Blake, Herman E. Winkler, Philip C. Kosch, Robert C. Hulse, Norman J. Gill, Joe F. Witt.
Exhibiting: Winkler low and high pressure oilburners, rotary cup oilburner, oilfired wall and floor furnaces, oilfired Universal furnace, oilfired winter air conditioner and boiler.
New Product: Winkler Universal furnace for gravity, forced air, utility or counter-flow installations, fired with Press-O-Vap oilburner, low or high pressure burner.

Watts Regulator Co. (245)
Attending: C. S. Gates, B. G. Robertson, R. W. Giffin, Mike Mercury, Tony Mercury, Steve Fitzgerald.
Exhibiting: Temperature and pressure relief valves, pressure reducing valves, pressure relief valves and regulators.
New Products: No. 74 and No. 174 ASME approved pressure relief valves.

Webster Electric Co. (236)
Attending: B. T. Wiechers, Louis Ehrich, William Wenszell, H. B. Hastings, J. H. Lahey, P. B. Maurice.
Exhibiting: Fuel units, ignition transformers, Thermodrive.

White-Rodgers Electric Co. (131–2)
Attending: Joe Newman, J. Rodgers, Jack Searls, Ed Robinson, R. Sherer, John Jung, G. Gibson, Joe Murphy, Deane Eggert, R. Weber, P. Williams, W. Chesbro, L. F. Blough, Arnold Petersen, C. Garner, C. Rennecamp.
Exhibiting: Complete line of automatic controls for oil heat, including thermostats, warm air, hot water and steam controls, primary oilburner, relays and stack switches.
New Product: Primary oilburner control.

Williams Oil-O-Matic Div. (228–9 328–9)
Attending: H. W. Burritt, L. A. Casler, M. V. Stagg, E. H. Davison, T. H. Green, R. G. Pinkerton, R. C. Osborn, T. H. Wagner, W. K. Johnston, J. H. Shoemaker, H. E. Earl, C. M. Pierson, C. G. Branch, F. O. Robison, F. M. Hines.
Exhibiting: Complete line of winter air conditioning units, cast-iron and steel boiler-burner units, conversion oilburners.
New Products: 1951 model Fifty-Ten low pressure oilburner, featuring metered low pressure; B series steel boiler-burner units.

York-Shipley, Inc. (240, 340)
Attending: S. H. Shipley, C. H. Neiman, R. C. Cochran, David Wepman and others.
Exhibiting: Oilfired boilers and furnaces, conversion oilburners.
New Products: Suspended units; Great White Line.

Exposition and Convention

(*Begins on page 63*)

economist for the Bureau of Labor Statistics, specializing in industrial classification, employment and construction and a member of the faculty of General Motors Institute of Technology, in economics. Also, he has taught at DePaul University, Chicago and has acted as a consultant to the Industrial Relations Center, University of Chicago. Among his other accomplishments is co-authorship of "Employment, Production and Income in the Chicago Industrial Area," along with regular contributions to Business Conditions, the monthly review of the Federal Reserve Bank of Chicago.

The Chapter Secretaries of the Distribution Division, following a precedent established in 1948, the last time the National Oil Heat Exposition was in Chicago, will hold a dinner-meeting on April 4. W. O. Spiess, national Secretary of the Distribution Division, is making the arrangements.

The final all-morning session is to be held on April 5, Dealer Day. Fred C. Haab, chairman of the Distribution Division, will act as chairman and welcome the dealers for whom the meeting is intended. Another panel of four speakers has been selected, consisting of John R. Sherwood, president Sherwood Bros., Baltimore, Md., who is to relate experiences in the Baltimore area on "Cooperation in competition with natural gas." Carl R. Jonswold, vice president, Arrow Petroleum Co., Forest Park, Ill., will speak about the "Fueloil supply and problems for 1951"; C. T. Burg, vice president, Iron Fireman Mfg. Co., will warn the dealers to "Beware of the three bad bogeymen" and Robert Gray, Editor, FUEL-OIL & OIL HEAT, on the subject, "Looking ahead at oilheating."

The Exposition will close at 5:00 P.M. on Thursday, April 5, to permit all to attend the annual dinner and entertainment. OHI's annual banquet, as usual, will be preceded by a get-acquainted cocktail hour at 6:00, with the dinner scheduled to get underway at 7:30 P.M. Another tradition to be observed is the elimination of after-dinner speeches. Instead, E. N. McDonnell, president, McDonnell & Miller, Inc., as toastmaster will introduce the guests at the head table. This, then, will be followed by entertainment.

The program for the last day, Friday, April 6, calls for no sessions or meetings. The Exposition will open at 1:00 P.M. at Navy Pier and close finally at 8:00 P.M., since a survey of exhibitors indicated a preference for the earlier closing on the last night.

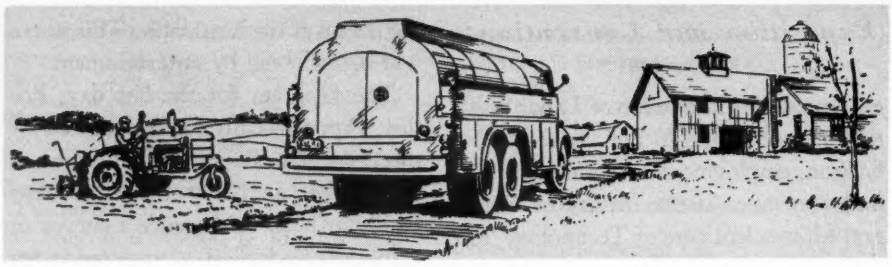
J. W. Owens, vice-president, Mercoid Corp. and a vice-president of OHI, is in charge of preparations for a Ladies' Day Program. A committee of industry ladies, headed by Mrs. Owens and Mrs. W. A. Kemp, is planning a diversified program of interesting activities.

Old Timers' planning Chicago Jamboree

THE OLD TIMERS' CLUB of the Oil Burner Industry, Inc. will hold its annual Jamboree during the OHI Convention in Chicago on Tuesday, April 3. The 17th floor of the Furniture Mart, facing right on Lake Michigan, has been reserved for the occasion, where the bar will open at 6:00 P.M. and dinner will be served at 7:30 P.M.

The usual shenanigans are expected, along with outstanding entertainment arranged by Jim Owens, national chairman, and his associates. All active Old Timers—that means those whose dues are paid for 1951—and Life Members are urged to make their reservations for this gala event as early as possible. Send them to H. A. Maccubbin, secretary, Old Timers' Club, 4616 North Beacon Street, Chicago, Illinois.

J. A. O'Brien, general manager, Industrial Products Div., Johns-Manville Corp., New York 16, N. Y., has been named one of three new vice presidents of the company. The others are *Harold R. Berlin,* general manager, Building Products Div. and *A. S. Elsenbast,* general manager, Celite Div. All formerly were vice presidents of the Johns-Manville Sales Corp. and now will take an active part in the work of the new over-all company Planning Board recently established. Mr. O'Brien joined the company in 1915 in the sales promotion department.



Know your Costs

Part I. Introduction to a Series on Management for Fueloil Distributors

by
H. H. Ragle

BEGINNING WITH THE DRILLERS of the original Drake well—Titusville, Pennsylvania, 1859—the typical oil man has been a daring optimist. Through his ever-present enthusiasm and "willingness to take a chance" a very great industry has been founded and developed, all within a comparatively short time. Its very greatness all but staggers the imagination and the ability to comprehend truly the leading part it has played in revolutionizing the standards of progress and of living throughout the world, particularly in these United States.

Likewise, the typical fueloil distributor has also been a "daring optimist," and one fully sold on his convictions, for otherwise liquid fuels would not have so successfully supplanted other fuels. Oil has indeed become nature's finest, cleanest and safest fuel for modern day heating comfort. From this high position the industry, as such, is definitely alert and ready to meet the so-called challenge of natural gas.

Throughout these formative years, however, the average fueloil distributor has probably been more sales minded than operating minded. For the sake of volume, he has frequently ignored many of the principles of sound business, as evidenced particularly in some of the costly extremes of delivery service and of burner service. Too often he has been so absorbed in the process of selling volume that he has been accused of being blind to profit. "Volume mad and profit blind," the critics say. Such criticism has long prevailed, but perhaps even more frequently leveled against the major companies, than against the non-integrated or independent companies.

Because of the many "growing pains," partly in the midst of gravely upset world conditions and the necessity of keeping pace with the phenominally increased demands, the industry at large has not taken the time to solve and perfect the answers to some of its own internal problems.

With conditions as they are, locally and world-wise, it is now of paramount interest and necessity that the fueloil distributor must become more "cost conscious" than ever before, if he is to survive successfully and profitably another period of government restrictions and some regulations, greatly inflated costs of operation, and—following a return toward more nearly peacetime conditions—a decidedly more intensive era of competition from within the industry itself, to say nothing of the gas competition, which may eventually become more of a factor.

In the general field of business, if a manufacturer or merchant fixed the price of his product or service strictly upon the price which a competitor might charge—rather than upon his own cost—(based upon an efficient operation), it might properly be said that he was operating under a very unsafe policy, yet that is precisely what the fueloil distributor must do if he is to remain competitive with legitimate competition. In the main we all know that prices usually seek their levels with competition and particularly by that segment of competition known as the integrated or major companies who, for the most part, also have an interest in (1) production of crude, (2) refining, (3) transportation, as well as in (4) the marketing of the finished product to the ultimate consumer.

It must be borne in mind, however, that fueloil today is being sold in markets in which the retail price has been doubled and the cost of labor has been more than doubled in the past ten years.

Margins have lagged

Margins, as established by the major or integrated companies, have not been increased commensurately with the greatly increased costs and the increased sale price of the product. Were it not for the relatively greater efficiency of the well-managed independent fueloil distributor and the relatively greater acceptance of fueloil and burner services from a wide-awake independent, there would have been an infinitely louder clamor and demand for a further sensible and justifiable increase in the margins. There should be a greater net financial return to more adequately compensate the distributor for the investment and the many years of hard work he has expended in developing a business filling a much needed consumer demand.

Toward such objectives, various trade association groups have from time to time in the past engaged in surveys and other constructive efforts looking to the determination of "actual costs" within the industry, which, in turn, could be used in support of establishing livable margins between legitimate "laid in" and "delivered costs at retail," but as yet it cannot be said that the industry has adopted any type of a uniform system of cost finding for the various marketing segments of the industry at large.

Until such time as the various individual company units of the industry become sufficiently cost minded and persistently pursue a highly defensible course of "doing something about it," there may not be too much hope of expecting anywhere near the real relief the industry is entitled to enjoy, except perhaps of a sporadic nature where "the united clamor" has been heard and felt by other segments of industry—and which relief may now be depend-

ent somewhat, if not altogether, upon government bureaus—a course which industry does not like to find itself dependent upon, if it can be avoided.

The situation in the case of a well-managed individual company organization certainly need not be regarded as hopeless by any means, for the average organization can "do something about it" without having to depend upon the slower-moving association effort. Adoption of a uniform cost finding system for the fueloil segment of the industry and the cooperative effort made possible thereby will constitute the industry's greatest hope for adequate margins, but the individual organization, so minded, can start now. It need not be tomorrow or the next day or the next month or next season, but now.

Compare the idea of "cost finding" or to know your costs with the architect's blueprints, the instrument panel on the cowl of your car, or the various indicators and controls to be found in a modern railway locomotive or in a modern airplane. Not to know your costs is to be needlessly handicapped in the conduct of your business, regardless of size.

So Few understand Costs

It has been so apparent, over the past several years of observation, that few oil men really understand cost finding. In such a modern and highly-competitive industry there is nothing of greater importance than to know your costs. Some feel that "cost finding" is a very complex matter, and perhaps it is in some lines of highly specialized and widely divergent lines of manufacturing, but it need not be a complex problem, particularly for the fueloil industry.

It would be amazing for the average oil man to observe the very wide range of conceptions as to what accounting, as to costs, is actually important and necessary for the proper conduct of the business. Two extremes might be presented: (1) The viewpoint of a major company, which goes into "split hair" detail. They can furnish you—weeks or months after it is entirely too late to do anything about it—a beautifully prepared cost statement showing the fractional 1/10,000ths of a cent which the periodic cost of truck painting is to the "gallon unit" delivered. (2) That of the one-truck ice and range oil peddler who figures his cost something like this: "I spent $3.00 for gasoline and oil today, and my gross profit was $15.00 from what I sold, so I made twelve bucks. See?" What he did not see was that he could not possibly afford to cut prices as he did. Poor fellow, "he is gone now, but others have taken his place." Either extreme can and will wreck the average fueloil distributor; the first, because too late and without rhyme or reason in "splitting such fine hairs"; the second, of course, because the peddler's conception of cost may be limited to only two trivial items from among the many that actually have to be considered.

In the past several years of specialization, it has been astounding to observe the greatly divergent viewpoints of accountants, who should know better, and of highly successful sales and operating executives, who should also know better. For example, some have never considered depreciation of motor-truck equipment as a part of the direct operating cost of delivery. Others have charged off depreciation as against the direct operation, but with a given vehicle "charged off," figures have been produced which do not reflect any reserve whatever against the time when the vehicle would have to be replaced by new equipment. Others have kept no figures whatsoever on the cost of the automotive operation, except perhaps that of a "general expense item" into which has been thrown all of the operating expense of trucks, service cars, salesmen's cars, or car allowances for salesmen, service men, executives, etc.

What's your Payroll per Gallon

If one were to inquire, even among some of the highly-responsible companies who had long been in the business, "What is your driver's payroll cost per gallon?", or, "What is your direct delivery cost?", it may result in a blank look on the face of the executive being interrogated, followed by a pause and a quiet-voiced admission in effect, "We do not know."

It has been appalling to be in quest of information as to productivity figures in connection with the tank truck delivery of fueloil or gasoline, or both, only to be met with an explanation that "we have no figures as to the output per hour, per mile, average per delivery, but our trucks average 'so much per day'." Then, after later investigation of the crudely-kept figures, the executive was quite surprised to learn that each truck day involved considerable overtime, thus making the daily figures relatively meaningless. In still many other cases, figures as to the truck output have been quoted for only a very short period of time in the height of the season. Again, the boasted figures were really meaningless, for costs throughout the season or year keep right on piling up and must be considered.

More important today

Competitive conditions, and the very nature of the industry, demand vastly more knowledge of costs than were formerly considered necessary. An adequate system of cost finding need not be elaborate nor expensive, but costs must be set up in such form as to enable the executives who are responsible to make deductions or decisions therefrom as to the underlying reasons, and at the same time to have a practical answer as to what may be done to reduce them wherever and whenever possible.

To be practical and worthy of adoption—especially for a moderate-sized business—the system of arriving at costs must at all times be kept simple and not too complex, lest the time and cost of securing the information should become greater than the gain to be derived therefrom. A business can just as surely be "bled to death" by excessive and unnecessary overhead, as would be the result from the wanton dissipation of assets through any one or more other wasteful activities.

In the "growing pain" period of building up a great industry, too much time has been spent in building volume and too little time and consideration has been given to the all-important, all-encompassing subject of simple cost finding, and the cost control work which will be the natural outgrowth for executive function immediately stemming therefrom.

In the medical profession there are some renowned authorities who insist

that the ability to properly diagnose a patient's condition is even more important than the treatment which might be subsequently used. The layman and the trusting patient should feel, "I am not going to be a guinea pig and be the victim of experimentally prescribed drugs or surgery."

To know your costs is to know how best to administer remedial measures and is just as vital to the successful conduct of your business as the proper diagnosis is to the medical profession.

It makes no difference—so far as the ultimate effect is concerned—why a disproportionately high cost may exist. A needlessly high cost means continued dissipation of assets, and without a disproportionately high margin of profit to support it, can mean only one thing —the inevitable dissipation of capital assets to a point where there are no further assets to dissipate.

Frequently in business it is a case of "no one in particular" having been delegated by management to prepare the simple figures required to have a practical approach and comparatively inexpensive record by which to know your costs and to have them available quickly following the close of a day's work—in the case of the tank truck delivery operation—or a slightly longer interval, in other phases.

Get employee Cooperation

Unless properly approached, your employees may not find the idea of cost reduction a very popular subject, especially when broached to a "live-wire, on-its-toes" type of a selling organization. So many times the employee will make snap judgment and get on the defensive for fear that management may be planning to cut his personal earnings, and they naturally do not relish such a thought, especially under the many inflationary spirals we have been going through and which are not yet curbed. When launched in a frank understanding manner, it will be surprising how much real help can be obtained from the various employees cooperating along constructive lines to reduce sales and operating costs.

One of the most certain and constructive methods whereby costs may be reduced is to get greater sales, greater results out of the "payroll dollar." This, at first thought on the part of the employee, may be considered as exactly in reverse to what has been so freely taught by some of the "social planners" of the past several years, but when it is all said and done, there is no better or sounder method by which an employee can gain the proper and rightful appreciation of management than by delivering more in the way of results for the compensation he receives as a reward for his labor. Insofar as it may be practical, some form of an incentive should be applied to stimulate the interest of the employees to do a better job.

It is a far better answer on the part of the industry by which to reward the loyal and productive employee than any one or all of the many "crackpot ideas" which have been foisted upon some industries during the past decade or so by vote-seeking politicians and some of the "outside-of-the-industry labor racketeers" who have been trying to exploit labor at every possible opportunity.

Keep your Methods simple

Knowing your costs, may result from needless duplication of office procedures or in records which are too elaborate to serve any particularly useful purpose, other than perhaps to keep someone employed just for the sake of being employed. Recognizing such excesses and then bringing about remedial measures can be the means of appreciable monetary savings. There is absolutely no room in the typical independent fueloil distributor's organization for "red tape." Don't go overboard, however, in the other direction and have less than the really essential figures upon which the executive direction of the business must depend.

Know your costs in respect to the extension of credit. Lax control over the all-important function of judiciously extended credit accommodations may easily mean excess costs that need not be imposed upon your operations. Perhaps you have known of some ambitious credit manager who boasted to his boss at the close of the year's business that there had not been a single loss from a bad account. The proper answer in such a case is, of course, to "fire the credit manager" because he, through his over-caution, has without a doubt disparaged many thousands of dollars worth of sales which might otherwise have been made and at a profit without unreasonable loss.

There is a more moderate course, the one more nearly down the middle of the road business-wise, than that represented by either extreme.

Material, Labor are Money

Merchandise, or direct service labor, should be recognized and considered as money. It is therefore profit. Have an excessive "charge off" of uncollectible accounts and you have direct and needless costs, for they are deductible, dollar for dollar, from the resources which would otherwise be profit.

An attractively presented Budget Plan of payment over a nine-to-ten months' period of time should very definitely minimize cost of collection expense and minimize operating headaches so usually incident to slow-paying accounts and C.O.D.s.

In review, start now, if necessary to more accurately know your costs.

Work unceasingly at every opportunity with other members of the industry for the adoption of uniform cost finding and accounting procedures for the fueloil segment of the great industry of which you are a part.

Please remember that sound cost control does not call for "split hair" detail nor expensive and elaborate systems and records, but the methods employed should be adequate.

With world conditions as they are, it is not likely that the creation of new fueloil volume can be carried on at the high pace established after World War II. While the overall picture does not indicate that oil will be in short supply, it certainly cannot be taken for granted that we will continue with unlimited expansion especially in the event of another world wide war.

It would therefore seem most pertinent, if not indeed imperative, that the individual units of the industry must critically review and analyze all possible costs, and to bring about greater efficiencies in all phases of operation.

Subsequent articles will deal with some other vital phases of the fueloil distributors problems in connection with the theme "KNOW YOUR COSTS."

Sparky clarifies boiler Ratings

World's No. 1 Service Man untangles radiation load Figures

by
J. W. Schulz

FOR months now, Sparky's been spreading the story of how he solved a heating problem which had licked the best heating engineers in the country. Here's the inside story on this and on the conference that didn't end until Sparky had proved himself a wizard of a heating engineer.

Late one night Sparky phoned me, urging me to hop a plane and come get the facts on this heating headache which had grown out of coupling a new building to an old one and using one new boiler to heat both. The question of overloading the new boiler was to be brought up at a big conference. He tossed in his opinion that boiler load problems work out better when figured in horsepower. Years ago, he said, he'd worked both as fireman and steamfitter in a plant which had boilers bigger than 2,000 horsepower. There the loads always were figured in terms of horsepower, and trouble with overloading the boilers never came up.

"What's a horsepower, anyhow?" Sparky asked over the phone.

"Take it as equal to 33,475 or 33,479 Btu's per hour," I replied, "but never forget, figure it at the boiler."

"At the boiler," Sparky's voice echoed long distance. "All right, I'll remember, figure it at the boiler."

Next day, when I arrived at the airport Sparky met me and as he drove me into the city he filled me in on details of the big heating enigma and the conference to solve it, which we'd attend.

He would, he related, to start out use my tip-off and figure the load at the boiler, though he wondered how that would help on this job. I couldn't get a word in edgewise to say anything, for Sparky kept pouring out details of the trouble and what he figured caused it. Without waiting for any answers, he tossed out one question after the other.

Can convector radiators be used along with cast-iron radiators in an old system just converted to forced hot water? Can a boiler be undersize if the combustion tests come out all right? If the boiler is big enough, what makes a burner run all day? Can 3.0 gph heat buildings equal to a three or four family house?

"Have you the load figures?" I finally broke in and asked.

"The load at the boiler?" he said. "Nope, got no load figures."

While I was checking in at the hotel and catching up with the breakfast I'd missed boarding the early morning plane, I pointed out, Sparky might go to the trouble job, which was nearby, and get the load data.

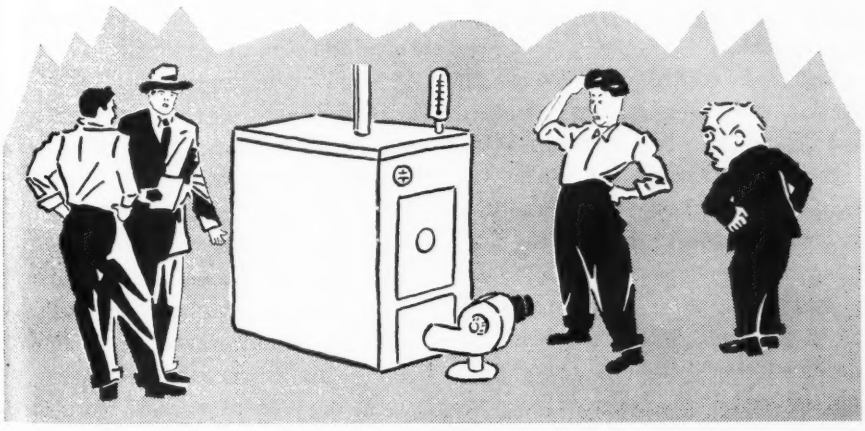
In an hour he was back at the hotel speeding me through my second cup of coffee and telling me the old building had 778 sq. ft. of cast-iron radiation. At 3.0 gph, the boiler gave 570° stack temperature, 11¼% CO_2, .01" over-fire draft, and .06" smokehood draft. I commented the boiler flues might need cleaning. Sparky couldn't tell a thing about the load of the convector type concealed radiators in the new building also heated by the boiler, except that they looked feeble and had no name plates.

He might have helped pick the boiler size, he said. He wasn't certain. His boss, the owner of the oil company responsible for the whole heating job, had asked Sparky some questions before the job had been planned. Sparky had told him the 1.75 gph nozzle then used easily heated the old building and that the new building, having two-thirds the floor area of the old one, would need 1.25 gph.

"You figured, then," I said to Sparky, "about 300,000 Btu output at the boiler to heat both buildings?"

"At the boiler?" he asked. "Like figuring boiler horsepower for the 2,000 horsepower boilers? I reckon yes. But if that 3.0 gph boiler's too small, the boss may say I made all this trouble with the wrong boiler size."

We arrived at the trouble job and sat down at a table in the owner's



"**Can convector radiators** *be used along with cast-iron radiators in an old system just converted to forced hot water? What makes a burner run all day? If the combustion tests come out all right, can the boiler be undersize?*"

Sparky's Here Again!

"Somebody's got to be the world's No. 1 oilburner service man, and it just happens to be me," says Sparky.

Making his fifth appearance here since his debut in the January 1950 issue of FUELOIL & OIL HEAT, *in this story Sparky proves he can out-engineer any heating engineer in the country. We pointed out to Sparky he was lucky the boiler was oversize to start out, therefore could carry the load even with 50% more radiation in the new building. He said that wasn't luck; his boss should have installed a boiler rated for 4.0 gph after Sparky told him a fire size of 3.0 gph was needed to heat both buildings.*

"I believe I am speaking for every service man in the country," Sparky declared grandly, "when I give this advice to equipment dealers, architects, and heating engineers. Always install a boiler rated for 4.0 gph where you plan to fire 3.0 gph!"

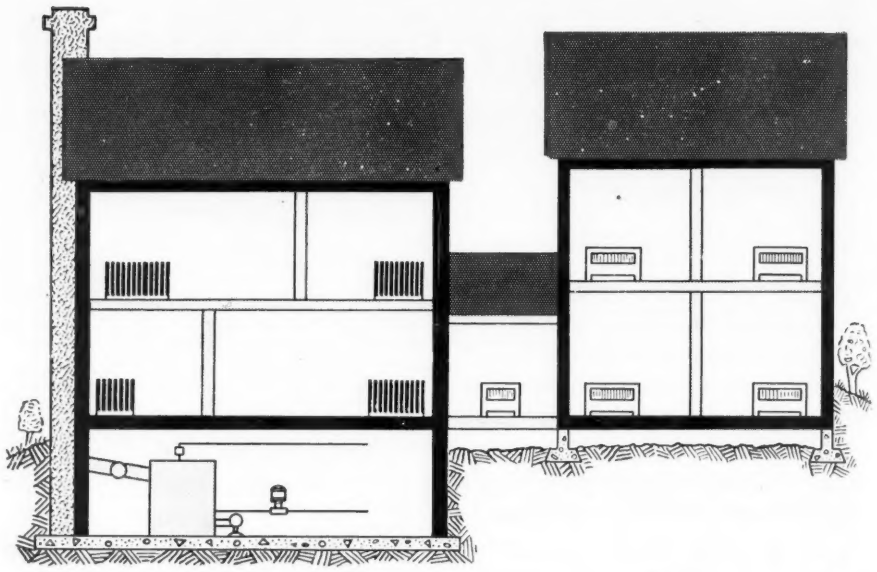
conference room. Both buildings were made up of offices and laboratories. Evidently four men besides Sparky and I would be present.

No. 1 man of these was the owner of the buildings, complaining about sky-high oil consumption and failure to heat the new building to 70°.

No. 2 man was an architect friend of the owner's, there to handle technicalities. Sparky whispered the architect didn't know beans about nothing, as far as oilburners go.

No. 3 man was the oil company owner for whom Sparky works. On this job, the oil company had its own employees install the oil boiler, but gave out the whole job of heating the new building to a heating contractor.

No. 4 man at the conference was the heating man who had contracted with the oil company to install the heating equipment.



The old building *at the left was overheated after the new oil boiler was installed, but the new building was underheated even though its radiators heated properly and its heat losses had been figured accurately. The trouble which Sparky ended on this job is no joke. Encountered often today, it results from failing to use the same design basis for all the radiators in a hot water heating plant.*

The owner's Story

The first two hours of the conference amounted to out-and-out wrangling with the equipment owner and the oil company boss making all the noise. The owner told of terrific oil bills and 55° to 60° in the new building. The oil man admitted responsibility for heating both buildings properly, but wouldn't admit anything else. He said nobody knew for certain the oil bills were excessive, and that perhaps Sparky had blundered in putting the thermostat in the new room that connected the two buildings. Sparky didn't dare speak up, having been told by his boss to say nothing, but the owner declared that if Sparky didn't have any sense or responsibility he should not be sent out by the oil company to answer complaints. He added that with the thermostat located in any room and set at 70° every room in both buildings would be heated to 70°, if the boiler was big enough.

At this, acting as if now he was going to get somewhere, the architect asked the oil company owner, "What is the total load on the boiler?"

"What radiation did you install in the new building, and what's in the old building?" the oil company owner asked the heating contractor.

"I put 470 sq. ft. of radiation in the new building. I don't know what's in the old building," the heating man answered uneasily. "The old building always heated well and it heats well now. Every radiator in both buildings gets plenty hot. I connected to the boiler that you installed."

"Then you don't know if you overloaded the boiler," the architect told him flatly. "I say the boiler's greatly overloaded."

"If only we knew the radiation load in the old building . . ." the oil company owner said helplessly.

I nudged Sparky. Without any one else seeing me do it, I showed him my scribbled notes on what he'd told me earlier. They included the radiation figure of the old building.

"Boss," Sparky spoke up, "the load in the old building is 778 sq. ft. of radiation."

Everyone turned and looked at Sparky with new respect. Amazed and delighted to be the center of interest, Sparky went on, "The old building has 778 sq. ft. and the new building has 470 sq. ft., but the total 1,248 doesn't mean a thing. It's not figured at the boiler, like horsepower.

"You've got to," he said with the authority of a college professor, "figure the load at the boiler or your figuring doesn't mean a thing!"

"I don't get it," said the architect. "You're saying net load doesn't mean a thing. You're here representing the oil company which installed this boiler we're saying is undersize. You tell us the load is net 1,248 sq. ft. Well, I checked and learned the boiler is rated by its manufacturer for maximums of 3.6 gph and 1,680 sq. ft. hot water, net basis. To me it proves your boiler is oversize, yet you say it doesn't prove a thing. Now, old-timer, exactly why do you say we've got to figure the load at the boiler or it doesn't mean a thing?"

Sparky's boss kept telling him to be quiet, and kept telling everybody that Sparky was not representing the oil company.

But the owner of the buildings pounded on the table and said, "If he's got something to say, let him say it. We all want to know why these figures don't mean a thing."

Glowing in the warmth of all the attention he was getting, Sparky finally answered, "It's like with horsepower problems of the 2,000 horsepower boilers I engineered." He didn't say he was a fireman or watch engineer on these boilers and had done their pipefitting besides. Seeing that mentioning these boilers fetched him more respect and attention, he went on, "When I connected loads to these 2,000 horsepower boilers, I did not overload the boilers. Never!"

"You didn't!" breathed the heating

contractor, seeing Spark in a new light, as the master-mind behind the design of the biggest power plants.

"All right, you win then," said the owner. "Figure the troubles of this system your way. How do we start?"

"Figure the load at the boiler. Always figure it at the boiler. Never forget that," Sparky decreed. He looked around as though that solved the whole problem.

"Did you figure it at the boiler?"

Actually Sparky had, I knew, little more than this to say about the trouble. But the equipment owner, more than anxious to draw him out, pointed out urgently that Sparky had started saying this when loads of 470 sq. ft. in the new building and 778 sq. ft. in the old building had first been mentioned. What about these loads, he asked Sparky.

"Well, take the 470 sq. ft. of radiation you installed in the new building," Sparky said to the heating contractor. "Now you did not figure that at the boiler, did you?"

"How did you figure that 470 sq. ft. load for the new building?" asked the equipment owner, turning also to the heating man. The architect said that he, too, wanted to know.

"Well, here's the notes I got today from the man at the supply house who figured this job for me," the heating contractor said meekly. "He always figures jobs for me. All I did was give him the plans of the new building and tell him it was forced hot water. These notes show he figured 93,062 Btu per hour heat loss, divided by 200 Btu per square foot of forced radiation, and wound up with 470 sq. ft. of radiation.

"What's that at the boiler?" Sparky demanded.

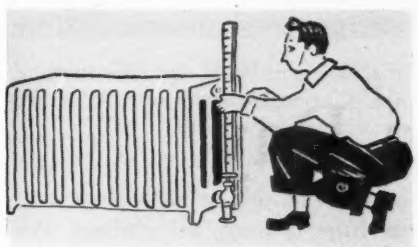
"I don't know what you mean," the heating contractor faltered. "I never figured horsepower or anything. All I know is you allow 25% or 60% or something for piping and pick-up. You get 200 Btu on a forced system, I think, using a closed system and a circulator, and 200° setting for the Aquastat. That's design basis 200° at the boiler."

"You see where you went wrong, not figuring everything at the boiler," Sparky reprimanded him. "Now figure at the boiler for the 778 sq. ft. of radiation in the old building."

"I'm not sure I can," the heating man said miserably. "Not in horsepower or anything. All I can figure is 150 Btu per square foot of radiation for an old gravity system with design boiler temperature about 150°, make a piping and pick-up allowance, and get a gross load at the boiler."

"At the boiler, what?" Sparky pursued.

The oil company man looked sick and whispered to Sparky, "What are you driving at? You can't be trying to prove our boiler is undersize. And we had won the argument about boiler size when you started all this! I hope you know what you're doing because I certainly don't."



The old building *had 778 sq. ft. of cast-iron radiation. The concealed radiators in the new building looked feeble, had no nameplates.*

Though I knew dragging Sparky out of the limelight wouldn't be easy, now that he was heading up the conference, I put my hand on his arm to keep him in his chair and quiet him. But he brushed me off and got up to say something more. I winced. However, what came out of his mouth was safe enough. He just repeated that the load should be figured at the boiler.

The architect and the equipment owner had been whispering together excitedly all this while, and now the architect jumped up. Running over to Sparky, he shook hands with him wildly and exclaimed, "You are the man of the hour! You've straightened out everything! I know what you did. To make certain we'd understand it for ourselves, you gave us the clue and made us figure it out ourselves.

"First, you brought out the fact that the new building is heated by radiation figured at 200 Btu per square foot, because the man at the supply house figured the radiation after being told it was a modern, forced, hot water system. 20% over steam size, the radiators go with 200° temperature at the boiler.

"Second, you brought out that the old building had an old, gravity-circulation hot water system with radiators 60% over steam size. Figured 150 Btu per square foot, these radiators go with a design temperature about 150° at the boiler."

By now, the owner of the two buildings also was rushing over to congratulate Sparky. "You solved the problem!" he shouted at the astounded Sparky. "Sure, we've got one circulator for the whole system and one temperature throughout all the radiators. To put them on the same basis as the radiators in the old building, we need radiators one-third larger in the new building, that's all. Up to now, for coldest weather a radiator temperature of 150° was more than high enough for the old building, but 200° radiator temperature had been figured for the new building. Once you point it out, even I can understand that. Kept at 180° on coldest days, the boiler was overheating my old building and wasting oil because that building takes most of the heat. It's bigger than the new building. But 180° at the boiler wasn't enough for the radiators in the new building, engineered for 200°. Now that Sparky's saved the day by solving the problem, we can easily arrange to eliminate the design flaw in this heating plant."

Sparky elucidates

"Do you say all that's needed is radiators one-third bigger in the new building?" the architect asked Sparky.

"Well," Sparky said judiciously, "I say make them one-half bigger to play safe, or install a few more radiators to amount to the same thing.

"I say, also, the owner got what he paid for. He paid only for the radiation already installed. He must pay on a fair basis for the installation of the additional radiation he needs.

"And I say one more thing," he said, pausing gracefully to accept a big cigar and a light from his boss, "don't ever forget what I taught you today. Always figure things at the boiler!"

Student Richard Hogan *proved particularly adept at learning complicated stockroom operations from Pickering stockroom manager Bob Stacey. Hogan got a part time stockroom job the following week at a local concern.*

Oil Men for a Day

To learn about free Enterprise, 16 high school Students take over Pickering

by
Robert Gray

A LOT HAS BEEN said and written about training young minds to better understand and appreciate their American heritage. The fact that several states have now passed laws to prohibit the use of teachers even remotely identified with communism shows that the public fears that youth may be contaminated.

One day last fall Horace Davenport, president of George W. Pickering Co., Salem, Mass., came up with the idea that one way to offset foreign subversive influences is to show young people what they now have that's better. The basic idea was to allow high school students to take over the operations of his company for one day. The announced purpose was to teach students the benefits and advantages of the American free enterprise system by having them work together with industry as a team. It would also give them a chance to know something about job requirements when their working careers began.

The first step was to call on the superintendent of schools and the high school principal, present the plan to them and ask their cooperation. Both officials responded with enthusiasm and offered wholehearted support. Davenport then called together his own staff, explained the plan and asked that they prepare their work schedules for this particular day in such manner that students assigned to them could gain the most from their experience.

Sixteen students, all members of the senior class, were chosen by school officials on a basis of vocational interest, those that the officials felt would gain the most by taking part in the project. Nine were boys and seven girls.

Local newspaper executives and radio station managers were then told all about the project and they promised cooperation. These people were also approached by the school officials and by the Salem Rotary Club which had shown interest and in fact voted to sponsor the idea as a general annual program.

Manuals were then prepared and distributed to the students ahead of time outlining the general functions of the company, the duties of the various departments and overall operations. This gave them an insight into several of the activities before they arrived.

On the big day the students reported in at 8:15. Davenport received them in the oilheating showroom, introduced them to his staff, and then everyone, including the company men, was given a name tag for easy identification. The students went to work in the following positions: president, vice-president, secretary to the president, treasurer, operations manager, service manager, heating department manager, advertising manager, credit manager, stockroom manager, order and shipping department, weather control operator, repair shop, industrial fuel, and sales and merchandising.

A football player, Arthur Cecolski, took over president Davenport's job, answering phone calls and learning

Behind the scenes, *in the world of oil, as Davenport describes where oil is obtained, how it is stored, how trucks load and then deliver to customers.*

the many duties and responsibilities of a company head. Another boy acting as service manager was making an inspection call at a local concern where the Pickering Company had just installed a dual-operating oilburner.

One boy called on a leading industrialist as a fuel salesman, finding out the correct procedure, learning how to make a presentation, seeing that a salesman must be well liked by receptionists, secretaries, janitors, men in the boiler plant.

Still another boy, riding with the driver in a Bunker C truck was learning the techniques involved in the delivery of industrial fueloils, meeting the people the driver meets every day. Back at the main office, one girl was discovering how busy the secretary to a president is, while another girl was getting instructions in the important job of weather control operator.

The vice-president and the sales manager for a day first attended the morning conference of the district representatives, then made the rounds of the various Pickering branch stores, assimilating the complexities of sales and merchandising. The boy who was treasurer for the day spent profitable time learning how bills are paid, statements prepared, records kept and other treasury duties. Another boy worked in the large stockroom, while down in the modern repair shop where fueloil trucks are serviced and maintained, a boy was getting his hands dirty learning about the job.

The advertising manager for the day, a girl who is editor of her high school magazine, prepared radio copy, learned advertising layout procedure and went with the photographer shooting pictures of the program.

On oilburner Installations

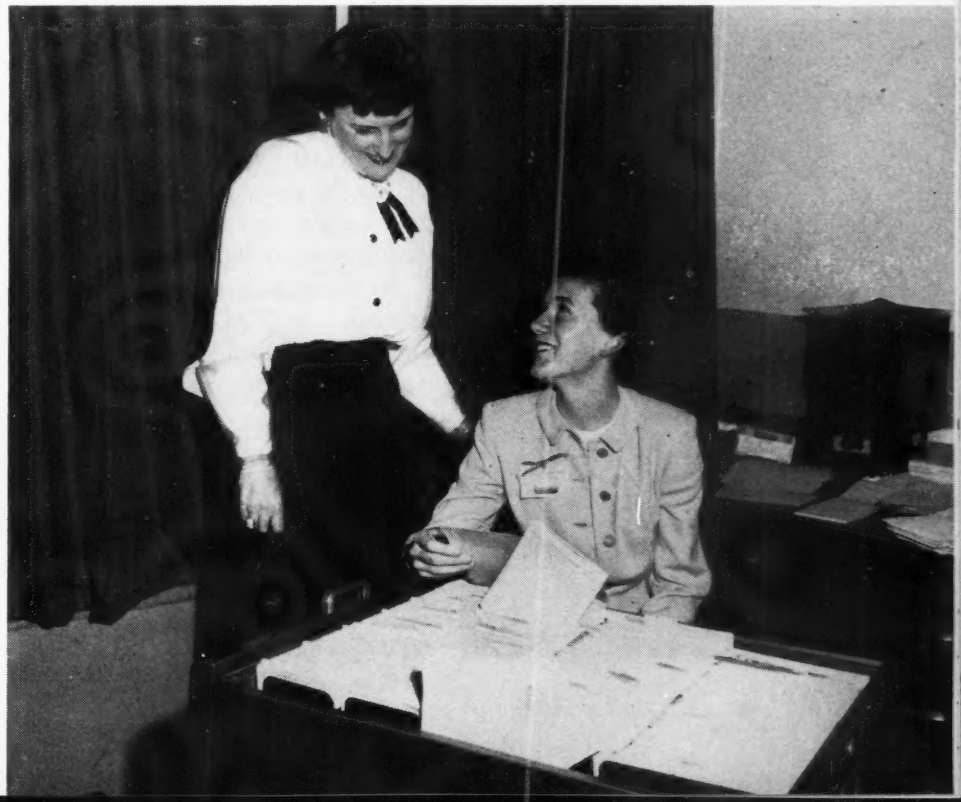
The heating department manager for the day went out on oilburner installations, talked with customers who wanted new installations, and gained first-hand knowledge of designing oilburner installations. The girl acting as credit manager learned how carefully bills are checked for accuracy for mailing, as well as the many other duties that go with supervising 20,000 accounts.

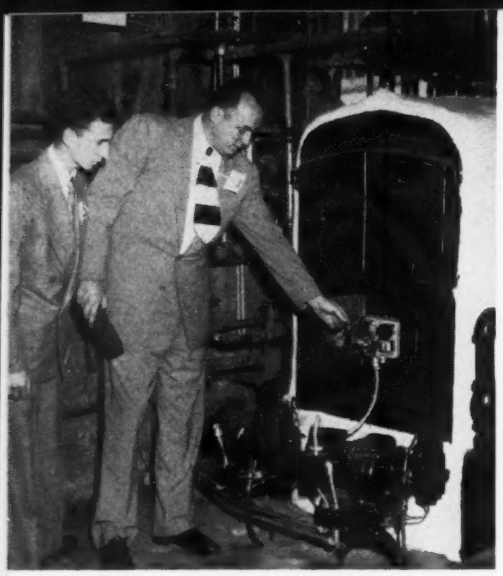
Pickering staff members coached each student along the way, and in each instance the point stressed was service to the customer. Students learned that complex systems were necessary if customers are to get the finest service at the lowest possible cost.

After working on the job for several hours, the students again met in the oilheating showroom. Davenport told them the "romance story" of the American oil industry and American free enterprise. He spoke in impressive terms about the right to work where you please at the job of your choice . . . about the freedom and opportunity to reach great heights, limited only by the student's initiative, imagination, perseverance and courage.

Student George St. Pierre *rode with driver Harold Smith on an oil delivery to a large North Shore industrial plant. Here St. Pierre gets a few fine points about the specialized process of industrial fueloil delivery.*

Weather control operation *proved an interesting and enjoyable job to student Nancy Splaine, right, as she learns the modern system from Pickering operator Irene McElroy.*





Jerry Abell, *left, as service manager for a day, accompanies Pickering service manager Everett Dawkins on routine inspection trip to check operation of new dual oilburner installation at Salem concern of Ruggles Klingman.*

Davenport *demonstrates to high school students the functioning of latest oilburning equipment and outlines the progress made by the oilburner industry to bring Americans finer heating at lower cost.*

Then as an object lesson in one detail of American industry, Davenport demonstrated the newest Winkler oilburner, stating that although it was particularly advanced in design and operation, American industry would soon produce another oilburner even better than this one. Competition forces the Winkler people, he pointed out, to produce ever-better products and they, in turn, force their rivals to do the same. He emphasized the point that by giving the customer the best at the lowest possible cost, American industry has thrived on clean competition, developed a spirit of teamwork, and forged a mighty nation whose people enjoy the most comfortable living of any nation on the face of the earth.

The students were then taken on a tour of the entire facilities at Pickering Wharf so they could relate their own job for the day to the over-all company operations. Then they came back to the Pickering "dream kitchen" where luncheon was being prepared by the home service director on the newest General Electric appliances that the company sells.

Just before sitting down to eat, the students made a radio tape recording which was rushed over to the local radio station for a replay over the air, and as the students ate luncheon they heard their own voices in a public broadcast from the station.

At the luncheon were the school officials, also Y.M.C.A. and Rotary top men and a well-known radio sports announcer. Each spoke to the students of the opportunities that awaited them and voiced the hope that similar programs could be carried out in other cities of the country to give other students the chance to work with business and industry as a team, learning the basic feel of Americanism through becoming part of the system.

The results of the program "Oil Men for a Day" cannot be accurately measured but it's obvious that they were big. There was great enthusiasm in the schools and among civic groups. The newspapers and radio stations featured the thing for several days. A full week later one radio station invited the students and Davenport to a round table forum to discuss their impressions of the day . . . this took 40 minutes' time, donated by the station as a public service feature. Rotarians plan to ask other industries in the area to give each student the opportunity to take part in such a program before graduating from high school.

As a public relations activity, the Pickering day was phenomenal. Whenever you can combine a widely recognized service to an enthusiastic public with very generous publicity and acclaim to your own organization, you've scored a hit.

Broadcast *from Pickering "dream kitchen" was tape recorded by local radio station. Fifteen minutes later, students heard themselves in playback over station, as they ate luncheon. Experience taught them importance of poise, clear speech and fast thinking as scripts were written by the students.*

We were on our Toes

How the Midwest fueloil "Shortage" was controlled in Milwaukee

by
Harold M. Mottram*

Edit. Note—Because of the switchmen's "illness" strike, several Midwest cities, principally in the Chicago area, and including Milwaukee, had a serious problem in early February. Dependent on tank cars, which were unable to move in choked terminals, these oilheating markets had a temporary supply problem which became acute. No one went cold, but there were anxious days for the local marketers of fueloil.

THE WISCONSIN OIL-HEAT ASSOCIATION, INC., combined with the Milwaukee Oil Men's Club to practically melt the frozen oil situation in Milwaukee just when it was about to get serious. The members did it by imposing self regulations and a rationing system for customers. They did it by cooperation between the members of the two organizations and non-members alike.

Milwaukee was in the midst of the longest period of below zero temperatures ever known in the city. More than 100 tank cars, full of fuel oil, were "frozen" to the railroad tracks by the sudden "sickness" of railroad switchmen. Customers were beginning to call the association office and complain that they couldn't get oil, while there was plenty of it in the city.

The association office called the Governor of the state and telegraphed the state's two Senators in Washington asking for some "cure" for the sick switchmen. When results were not immediate, every available person in the Association's office was put to work on the telephone and every oil dealer in the city and suburbs was contacted and advised that an emergency meeting of all fuel oil dealers would be held the following day, Saturday, February 3rd, at the Wisconsin Hotel. The telephone squad got busy at noon on Friday and by night-fall every fuel oil dealer had been contacted.

Saturday morning the temperature stood at 18 below zero, when 68 representatives of large and small oil companies, mostly small dealers, showed up for the meeting. Some of the smaller dealers were really worried. They had been without deliverable oil for up to four days and their customers were getting frantic. You know how customers can get.

Some dealers reported supplies on hand sufficient to handle their customers over a short period, none of them over 10 days and most of them being able to supply the demand, they said, only three or four days, on condition, they declared, that the customers would not be getting "panicky."

One dealer reported that he had made a trip to Chicago and when he viewed the "more than a thousand" railroad tank cars there "frozen" to the tracks through the sickness of the switchmen, "I almost wept."

All over Milwaukee men were out of work because of lack of materials through lack of freight cars bringing in steel, and other items. Hundreds of these men stayed at home nursing their shrinking fuel oil supplies and demanding that something be done about it all.

At the Hotel Wisconsin something was being done about it.

No One went cold

It was agreed, unanimously, that while the situation was not yet in the extreme stage, through cooperation of all the members of the industry that not a single customer would be allowed to be without oil. And so it was.

The industry heads agreed on a self conducted rationing of supplies on hand in which drivers making deliveries were instructed to measure the customer's supply and if it was found that he had enough on hand to last two weeks or more, not to make any delivery but to go on to the next customer, holding off on better supplied customers until they had reached only a two or three day supply. The dealers maintaining a degree day system found their work much easier.

Newspapers, Radio helped

By late Saturday afternoon the newspapers and radio stations were informed and started to report the decision: To deliver oil enough to bring the customer's supply up to 50 gallons for a space heater; 100 gallons for basement tanks for central heating plants; and 200 gallons for central heating plants with underground tanks. And thus assured, the public was satisfied. Everyone prayed that the zero weather would subside, even if the strike didn't.

But the fuel oil men didn't stop there. There was no telling how long it would be before this epidemic of "Trumanesia," as people called the switchmen's sickness, would subside. The Executive Secretary sent out more wires to Senators, the Governor and the Secretary of the Interior: "Do all in your power to force immediate resumption of service on government operated railroads," and more.

Local dealers contacted local railroad officials and arranged to haul their supplies direct from the railroad sidings when the tank cars were "frozen." Fuel oil drivers agreed to work nights and all day Sunday to move these supplies to the bulk plants.

Through the help of the Milwaukee Health Commissioner, Dr. E. R. Krumbiegel, and the health commissioners of neighboring communities, the state health commissioner was requested to break down the barriers to permit a full load to be transported by highway trailers. This he said was in the interest of the comfort, safety and health of the citizens of Wisconsin who heat their homes with oil. State laws on load limits permit truck trailers to haul only about 75% of capacity and about 60% of the state's fuel oil supply, during the winter months comes into Wisconsin from the lower end of Lake Michigan by this means of transportation. But the Governor and the Attor-

*Executive Secretary, Wisconsin Oil Heat Assn., Milwaukee.

ney General said that Wisconsin has a law which cannot be abrogated.

"Never say die," declared Walter Schroeder, president of the Milwaukee Oil Men's Club, and Harold Mottram, executive secretary of the Wisconsin Oil-Heat Association. The Legislature was in session so a bill was introduced which would authorize the lifting of restrictions for a limited period whenever the governor would declare an emergency. The bill ran into a snag and it will require additional effort before such a bill will become an emergency law. But by this time the switchmen's strike crumbled. Fuel oil began moving from the tracks to customer's tanks and by the middle of the following week all again was serene and warm in Milwaukee (even the weather went off strike with the switchmen.)

Milwaukee's 72,049 homes which are heated with oil could again move up the thermostat and tanks were filled to their capacity.

Only a few hardship cases developed during the entire period and dealers who had ample supply assisted the executive secretary by making exceptions to their work program and took care of their competitor's accounts.

Milwaukee had installed an additional 8,000 new oil burners during the past year, in spite of the recent natural gas invasion, and, as once the young girl cried, "Curfew shall not ring tonight," so the oil men of Milwaukee and neighboring communities did something about it and no home owner who used fuel oil to heat their homes went without ample supply to keep their homes warm.

U. S. Census Bureau survey's fueloil Outlets

IN A JANUARY 21 RELEASE the Department of Commerce disclosed its findings on Fueloil Dealers from the 1948 Census of Business. This covers number of companies, sales, payrolls and employees.

A fueloil dealer in this study is identified as a company which has more than half of its total dollar volume in that product. The study does not cover outlets that have their major dollar volume in one or more other products and a minor volume in fueloil.

According to the survey, there were in 1948 a total of 4,525 fueloil dealers. They sold in that year in fueloil a total of $732,119,000, or an average of $161,794 per dealer. From this it can be seen that many of them were quite small operators. The table shows by sections the number of such companies and their average dollar volume.

	No. of Companies Selling Principally Fueloil	*Average Fueloil Sales per Company*
New England	1,627	$123,913
Mid-Atlantic	1,686	199,220
Midwest	505	176,936
The South	314	88,219
Mountain	73	134,602
Pacific	320	212,968
All U.S.	4,525	$161,794

After compiling this table and then going back to study the Bureau of Mines fueloil sales data for the year 1948, it was possible to arrive at about the ratios of importance to fueloil marketing of this principal fueloil distributor, the major company selling direct and the other independents whose principal dollar volume is in some other product.

Percent of all Distillate Fueloil

	SOLD BY		
	Companies Principally in Fueloil	*Other Independents*	*Major Oil Companies*
New England	66%	17%	17%
Mid-Atlantic	67	11	22
Midwest	25	35	40
The South	23	62	15
Mountain	34	54	12
Pacific	66	22	12
All U.S.	53	23	24

The second table shows this by regions. In the Midwest, South and Mountain States it becomes clear that an important factor in fueloil distribution is the traditional gasoline jobber, while he is relatively insignificant to fueloil volume in the East. It is in the New England, Mid-Atlantic and Pacific States that the distributor with his prncipal activity in fueloil is predominant. These are the areas of greatest saturation in oilheating, making this type of operation practical and profitable.

Again, many of the companies classified as "other independents" because they have less than half of their total business in fueloil would be coal dealers and oilburner dealers who are just building up their fueloil gallonage.

❖

API Manual on cleaning Petroleum storage Tanks

A NEW EDITION of the American Petroleum Institute's manual on cleaning of storage tanks which have contained gasoline has been published by the Institute's Department of Technical Services. This replaces the first one published in 1942 and is "Section B," with a companion piece, "Section A," dealing with the cleaning of storage tanks which have contained unfinished petroleum products.

Sketches and drawings supplement the explanations of the hazards of tank cleaning, ventilating and vapor-freeing, disposal of sludge and sediment, personal protection and masks. The purpose of the new edition, available from API at 75 cents each, is to help prevent accidents.

❖

Premium Coal opens Flushing, N. Y. Terminal

A NEW OIL TERMINAL was opened on January 22 by Premium Coal Co., Flushing, N. Y., with a total capacity of 3 million gallons of storage. Both wholesale and retail operations are conducted, with trucks serviced from 24 loading racks. Four storage tanks hold 1,300,000 gals. of No. 2 oil, 900,000 gals. of No. 6, 550,000 of No. 4 and something over 150,000 kerosene.

The venture marks the first time that Premium has engaged in oil wholesaling. The company has been in the heating business for a number of years and has sold fueloil at retail in New York City, Westchester and Nassau Counties.

Financial Ratios for Management

Fifteen Yardsticks to compare with your own operating Statements

by

F. Raymond Kraemer*

ED. NOTE—*The case of John Doe is hypothetical, it does not relate the experiences of any particular company. To the extent that it may approximate the conditions of any one distributor, this is purely coincidental.*

FIVE YEARS AGO John Doe decided to engage in the business of distributing fueloil, oilheating equipment, gasoline and other petroleum products. He had had some years of experience in the petroleum field, first with a major oil company in their sales and operating departments; later with a petroleum distributor in similar activities. Like a good many of his fellow citizens he had spent several years in the army. During his years of employment he had been a frugal sort of fellow with some understanding of finance and had saved some money, sufficient to quite adequately finance the size and type of petroleum distributorship he wanted to operate.

After some looking around for a business to purchase, he came across one which had been in operation some four or five years, had suffered from the disadvantages of rationing and other wartime factors, under capitalization, as well as not too good management, which had prevented the business from growing, although it had paid the then present operator at least a "living income." The location of the business was quite satisfactory, competition was fair, it was in an area of increasing population, had storage facilities and was reasonably accessible both from the standpoint of receiving products as well as delivery.

John Doe bought the business, paid a right price for it and then interested himself in finding out what would be the true measurement of successful operation. Would it be because he would build up a large sales volume out of which he might make substantial profits while running the risk of going beyond his capacity for financing the business, or would success be a reasonable growth over a period of years on a known, sound, profit basis within his ability to capitalize such growth? He recognized that, while his background in the petroleum business had given him a good knowledge of the sales and operating "know how" needed to run this business, he was lacking in an understanding of the financial problems which would be involved and which he would have to meet if he were to make a real success of the business. This sort of thinking may have been unusual but it did reflect John's basic recognition of financial factors and, most important, he did something about it.

Establishing a financial Program

He sought financial information, discussing this phase of his activity with the Credit and Financial Executives of his supplying companies. He not only talked sales and operations with his established competitors, but also discussed the financial factors of his business and out of this accumulated knowledge established a financial program for the operation of his business toward which he has, during his five years of operation, directed all of his business activities.

Fortunately for him, he entered the business at a time when the development of financial ratios as working capital yardsticks and profit objectives to help chart management for petroleum distribution had at least come far enough along that such data was available to him. He learned that there were 15 financial ratios developed as standards in making financial projections and if he could keep these reasonably well balanced in relation to one another in the operation of his business, he would be successful.

Applying the Program

Of course, he didn't have the technical knowledge required for a full understanding of all these ratios, but it was pointed out to him that if he were to incorporate in his program just a few of these financial standards and direct his organization, financial and operating policies toward these objectives as well as establish his sales, pricing, personnel, delivery, purchasing, accounting and other activities with these few objectives in mind, it would follow that he would experience satisfactory business progress and profit while at the same time accomplishing a balanced financial program within the framework of all the 15 standard financial ratios.

John Doe found that the Ratio of Current Assets to Current Debts for his particular type of business should be 2.5 to 1 as of the end of the calendar year, which was his fiscal year, and he established this as his first objective.

He learned that the Percentage of Gross Operating Profit for a business of his kind should approximate 12% of his Net Sales; this Gross Operating Profit to represent the amount earned by the business before his and any other officers' salaries, as well as any special employees bonus or profit sharing pension plans which might develop in the business.

It was indicated to him that the Percentage of Net Profit on Net Sales for his business would have to approximate 5% if he were to retain enough funds in the business to adequately capitalize purchase of fixed assets for normal growth and to build up a satisfactory surplus.

Although at first he thought it quite technical he did establish as one

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*Financial Consultant, Mineola, N. Y. *Mr. Kraemer in recent years has been retained by some of the larger fueloil and oilheating firms in the New York area, so is well qualified to apply his talents to writing directly to our industry.*

He is a member of the National Association of Credit Men, New York Credit & Financial Management Association, a charter member of the American Petroleum Credit Association, secretary and treasurer of the Eastern Petroleum Credit Managers and a past president of the New York Petroleum Group of Credit Managers.

This is the third in a series of articles Mr. Kraemer is preparing on the general subject of financial and business management for the fueloil and oilheating equipment dealer.

of these few objectives a plan to keep the Percentage of Funded Debts (mortgages, etc.) to Net Working Capital below 100%. He came to understand that the degree to which his day to day financial problems would be minimized would be in direct ratio to his ability to keep the Percentage of Funded Debts to Net Working Capital below 100% figure.

Starting out with these objectives John Doe realized that to accomplish a Gross Operating Profit of approximately 12% and a Net Profit of approximately 5% he must first have a satisfactory Gross Profit from the sale of his products, materials and services. He found that in 1942, 1943 and 1944 the Gross Profit on sale of petroleum products had been between 23% and 24% and Gross Profit experience in the heating equipment field had been practically identical. Careful study of the expenses of the business and their relation to his 12% Gross Operating Profit objective developed that it would be necessary for him to enjoy a Gross Profit of 30% rather than 24% if he were to accomplish his final profit objectives; this after reducing his costs in keeping with good operation.

He developed an understanding on the part of his suppliers in the matter of his profit objectives. Pricing of the sale of his products and services was based on this 30% Gross Profit.

Prices based on need for Profit

John Doe did not always play "follow the leader" in setting his selling prices of products, choosing in most instances to establish his prices based on his need for a fair profit and his customer good will. He did not attempt to meet the lowest prices on heating equipment and service offered by his competitors but rather established a sales price structure geared to his profit objectives and based on supplying the best type of products and equipment along with the best possible service.

To perform in this manner John Doe realized the importance of adequate facilities. In a comparatively short time he added to his storage so that he might have 500,000 gallons capacity to take care of the volume he planned without any real possibility of shortage of product. He also acquired several new pieces of delivery equipment.

Pass this along

After reading this article on financial management, why not pass it along to your credit and financial executives? They will find the ratios and measurements useful for comparison with your own company's operating statements and balance sheets. Two earlier articles in this series appeared in the September and November 1950 issues.

In the expansion of these fixed assets he always kept before him the financial objectives which he had established for the business and any time his expansion plans tended to reduce his ratio of Current Assets to Current Liabilities below 2.5 to 1, or bring his percentage of Funded Debts to Net Working Capital up close to the 100% maximum, he made careful appraisal of his undertakings and while he did not always maintain these objectives during certain periods, such moves as he did make were carefully planned to bring them back to the standards which he had set.

It is true that our friend John Doe did not develop as much volume as some of his competitors during these years he has been in business nor has he built as big a plant as some, but he feels that having made his business approximately twice the size it was when he purchased it and having increased his facilities proportionately he has accomplished a degree of success in the matter of expansion and has maintained a financial position which should enable him to continue to expand in volume and facilities, as well as in profit, while still enjoying the advantages of a well balanced relationship in the various financial ratios of his business.

The table shows the balance sheet and operating statement of John Doe's business, the X.Y.Z. Oil Corporation, as of December 31st, 1950. See tabulation on next page.

It will be noticed from the balance sheet that during the approximate five years of operation the business has accumulated an earned surplus close to equaling the capital investment.

The Profit and Loss statement points up the practicability of the 30% Gross Profit with 18% for all expenses including administrative, leaving the objective Gross Operating Profit of 12% and a Net Profit of 04.3%, slightly below the 5% Net Profit which has been established as an objective.

In carrying out operations to conform with financial objectives it can be seen that reasonably adequate provision was made for officers' salaries and employees' bonus.

Let's you and I, as Financial Analysts, make some brief observations with respect to what this type of planning has meant to the development of the 15 financial ratios in the X.Y.Z. Oil Corporation, for an understanding of their indications and implications.

(1) Ratio Current Assets $106,000 to Current Liabilities $42,200 .....2.5 Times

Here is evidence of a good cash position, reasonable accounts receivable, satisfactory inventory, proportionate accounts and notes payable, all evidencing ability to meet obligations promptly and take advantage of discounts where offered. The difference between Current Assets and Current Liabilities represents a very satisfactory Net Working Capital position, $63,800, for a business of this size.

(2) Percentage Gross Operating Profit $50,400 on Net Sales $420,000 .....12 Percent

This represents reasonably proper objective for this type of business and, as indicated in Profit and Loss Statement, results in adequate provision for Officers' Salaries, Employees Bonus and Income Tax payments.

(3) Percentage Net Profit $18,200 on Net Sales $420,000 .....04.3 Percent

While this Percentage of Net Profit is not substantial, in a business of this size it allows for the payment of a reasonable dividend on Capital Stock, capitalizing of assets in keeping with the desire of the prin-

cipal for volume growth and satisfactory addition to surplus.

(4) Percentage Net Profit $18,200 on Tangible Net Worth $92,800 .....19.4 Percent

Here is indication of ability of management to earn a good return on investment. This is in keeping with the size of the business and the amount of investment and surplus essential to this type of distributing operation.

(5) Percentage Net Profit $18,200 on Net Working Capital $63,800 .....28.2 Percent

This further confirms proper profitable operation. Were the percentage much lower than 28.2 it might reflect an excess of working capital funds not being used to make profit or if the percentage were much higher than 28.2 it would reflect a probable lack of working funds in the business.

(6) Ratio Net Sales $420,000 to Tangible Net Worth $92,800 .....4.5 Times

This ratio shows the activity of capital in the business. If too high it can be a sign of over trading, if too low reflection of inadequate sales in proportion to investment. The ratio 4.5 Times is conservative for this size and type of business. The ratio could go to 6.5 to 7 times with the type of good management shown by other financial factors. However, under efficient management the tendency is toward the lower ratio of Net Sales to Tangible Net Worth as a business grows larger, to prevent the risks of over trading.

(7) Ratio Net Sales $420,000 to Net Working Capital $63,800 .....6.6 Times

This ratio is complementary to ratio Net Sales to Tangible Net Worth. In this business the 6.6 Times represents proper relationship to ratio #6 as well as other financial factors of the business. What must be stressed is to keep these two ratios in satisfactory proportion. While it is not likely to happen in this business a high ratio of Net Sales to Net Working Capital in proportion to Net Sales to Tangible Net Worth would reflect top heavy investment in fixed or slow assets, leaving an inadequate Net Working Capital position.

(8) Average Collection Period in Days .....19.1 Days

This represents a good liquidation period for this business. There are a number of ways of calculating collection period. The determination here is to know at the end of the year the number of days it has taken on an average to collect for each day's sales. This is arrived at by dividing the Total Receivables $22,000 by the Total Sales for Year $420,000 and multiplying the figure obtained by 365 days. This business has obviously had a well planned Credit and Collection Management program.

(9) Ratio Net Sales $420,000 to Inventory $69,000 6.1 Times

This is a proper relationship between Inventory and Sales for this Company as of December 31st, 1950. Petroleum products storage is sizable and filled quite to capacity because of seasonal conditions; material and heating equipment inventory is higher than usual for this Company in anticipation of some commodity shortages but is not expanded on a speculative basis.

(10) Percentage Fixed Assets $60,000 to Tangible Net Worth $92,800 .....64.7 Percent

Balance Sheet—Dec. 31st, 1950

X.Y.Z. Oil Corporation—John Doe, President

CURRENT ASSETS:	
Cash	$ 15,000
Accounts Receivable	22,000
Inventory—Petroleum Products	45,000
—Material—Heating Equipment	24,000
TOTAL CURRENT ASSETS	$106,000
FIXED ASSETS:	
Plant & Equipment (Depreciated)	60,000
TOTAL ASSETS	$166,000
CURRENT LIABILITIES:	
Accounts Payable	$ 20,000
Notes Payable to Banks	10,000
Reserve for Income Taxes	7,200
Mortgage & Equipment Payments — Due in One Year	5,000
TOTAL CURRENT LIABILITIES	$ 42,200
DEFERRED LIABILITIES:	
Mortgage Payable Beyond One Year	27,000
Notes Payable Equipment—Beyond One Year	4,000
TOTAL LIABILITIES	$ 73,200
CAPITAL:	
Capital Stock issued	50,000
Earned Surplus	42,800
TOTAL LIABILITIES, CAPITAL AND SURPLUS	$166,000

Profit and Loss Statement

December 31st, 1950

PETROLEUM PRODUCT SALES		$300,000	
Gross Profit on Petroleum Sales 30%			$ 90,000
HEATING EQUIPMENT SALES AND SERVICE		120,000	
Gross Profit on Heating Equipment Sales and Service	30%		36,000
TOTAL SALES		$420,000	
TOTAL GROSS PROFIT			$126,000
TOTAL EXPENSE, Exclusive of Administrative, Officers' Salaries, Taxes, Bonuses, Profits	13.5%	$56,700	
ADMINISTRATIVE EXPENSE	04.5%	18,900	75,600
GROSS OPERATING PROFIT	12%		$50,400
Officers' Salaries and Employees Bonus			25,000
NET OPERATING PROFIT			$25,400
Income Taxes			7,200
NET PROFIT	04.3%		$18,200

. . . . Financial Ratios

Here is one ratio in this business which requires some consideration. In general, it is most desirable to keep investment in fixed assets as low as possible. It is recognized that, particularly in this business, it is important to maintain adequate storage facilities, ample delivery trucks, modern service station equipment and heating equipment service facilities for successful operation. Consequently, the proportion of Fixed Assets to Tangible Net Worth might be high without being dangerous. Nevertheless it will be important to the continued success of this business to carefully study effect of additional investment in fixed assets as should the percentage to Tangible Net Worth go to 70 Percent or more it will be advisable to add to the Capital Stock investment.

(11) Percentage Current Debt $42,200 to Tangible Net Worth $92,800 . . . . . .45.5 Percent

This is a good position. It is indicative of satisfactory overall management with emphasis on importance of maintaining prompt liquidation of current obligations. It is well within a maximum of 70% Current Debt to Tangible Net Worth, which is the point at which this ratio requires careful consideration.

(12) Percentage Total Debt $73,200 to Tangible Net Worth $92,800 . . . . . .78.9 Percent

This ratio complements ratio 11. Like ratio 11, it represents a reasonably good position. Significance of this ratio is in the fact that it contrasts the funds creditors have "invested" with the funds invested by the owners. The negative implication is that as liabilities expand without proportionate increase in Tangible Net Worth a business becomes more and more dependent in its daily operations upon the attitude of its creditors. In this business should the total debt at any time approach 90% of the Tangible Net Worth it should require careful consideration as the handicap of interest charges, creditor direction, etc. may become a critical burden.

(13) Percentage Inventory $69,000 to Net Working Capital $63,800. .108.2 Percent

This is a complementary ratio to ratio #9 (Net Sales to Inventory), however relationship between Net Sales and Inventory is between two variable items that often change somewhat from one year to another, whereas ratio of Inventory to Net Working Capital is between one variable, the Inventory, and one item, Net Working Capital, that generally changes rather moderately from one year to another. Consequently, this ratio is a relatively fixed basis for comparison. In this instance the 108.2 Percent is a quite satisfactory position. It is found that this percentage varies materially with petroleum distributors, depending a good deal on storage capacity. Nevertheless a good guide is a 100% figure, as to go beyond this may under certain circumstances result in over expansion of fixed assets, current debt, and represent over-speculation in inventory which can create strained financial conditions. It is axiomatic that a business which is usually successful year after year is one that performs its fundamental services in a manner superior to competition in its field rather than one that speculates in inventory.

(14) Percentage Current Debts $42,200 to inventory $69,000 . . . . . .61.1 Percent

This is a ratio which reflects the balance being maintained between current obligations and inventory. It is a valuable yardstick when considered in relation to ratios 1, 8, 9 and 11. The percentage of Current Debts to Inventory might fluctuate considerably when comparing one company with another. However, in this instance it is on the conservative side and could get up close to 100 Percent before taking on any serious indications.

(15) Percentage Funded Debts $36,000 to Net Working Capital $63,800 . . . . . .56.4 Percent

It will be recalled that this was one of the four objective ratios which John Doe used in this business so that he might have to familiarize himself with a minimum number of technical financial factors and still accomplish the end results of operation.

In keeping the Funded Debts down to 56.4 Percent of the Net Working Capital the business was kept in a real liquid position. Had this percentage crept up to anywhere approximating 100% it would have adversely affected the whole general activities of the business.

We leave John Doe looking into a future of rather unknown general conditions. Under national emergency circumstances, will he suffer from shortages of products and material, possibly lose some of his capable manpower and will he have to absorb increasing costs from further inflation? Maybe so, but as a result of long range planning and making these plans effective he has placed himself in the best possible position from all aspects of his activities to successfully cope with this change in the business cycle.

In presenting this analysis as well as the articles in the September and November 1950 issues of FUELOIL & OIL HEAT, I have attempted to emphasize that capable long range financial planning in the field of petroleum and equipment distribution will make for more profitable individual businesses, will further strengthen this distribution in proportion to the number of companies that engage in such planning, will make for a better understanding of financial problems of distribution by all segments of the several industries involved and will one day develop financial standards which the various groups engaged in petroleum and equipment distribution might use as financial objectives.

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George T. Underwood, acting head of the Heating and Plumbing Sections, Building Materials, Div., NPA, Washington, is leaving the agency April 1 to become managing director of the American Institute of Wholesale Plumbing and Heating Supply Associations. The Institute is opening Washington headquarters. His successor has not yet been selected.

More "Useful Ideas" from the Contest

Final Batch of Ideas: some of these are more Interesting than Useful

FUELOIL & OIL HEAT winds up its Useful Ideas Contest with the following batch of ideas selected from the stacks and stacks of entries. Not considered prize winners by the judges, each of these ideas is none-the-less outstanding. Some are not original but are valuable in passing on the benefits of the experience and knowledge of the contestants. A few are not 100% practical and therefore do not conform to the theme of the contest, but make interesting reading because of their unusual or unique slants. The contestants whose words appear here in italics receive payment checks, though they missed out on big prize money. For details about this and about the dozens of other entries which won prizes or came close to winning prizes, read the contest articles which appeared in the October, November, and December, 1950 issues of FUELOIL & OIL HEAT.

That this contestant has increased safety and related delicate refinements on his mind is brought out by two of his contest entries; he is Charles W. Fisher, 745 Brooks Rd., North Hills, Penna.

"The optical or light-operated control system," declares the contestant in part of one of the entries, "while slower in response than the electronic controls, is nearly as foolproof as the older, bimetallic actuated relay systems."

That declaration may prove enlightening to control enthusiasts who after reading it attempt to list the makes of light-operated controls which are not the electronic type. However, the contestant goes on, "Perhaps the most important consideration in the choice of combustion safety controls is the time lag after flame failure. Both the blackened diaphragm type and the thermostatic bulb type would respond faster to flame failure were it not that residual heat from the rear wall of a hot combustion chamber holds them 'on.' If they see a cold surface on flame failure, they are nearly as responsive as electronic controls.

"To this end, I mount a Pyrex glass prism in front of these flame controls, as in my drawing, refracting the axis of the light of combustion upward, over and beyond the incandescent rear wall of the firebox to the water-cooled surfaces of the boiler. Instead of 'seeing' the incandescent rear wall upon flame failure, the control 'sees' the water-cooled parts of the boiler.

"This arrangement not only responds fast enough in some cases to meet insurance requirements, but provides low-fire protection. A flame failure response of two to five seconds can be attained. When the strainer or nozzle needs cleaning there will not be enough luminous flame in the higher light axis to register upon the safety control, and a 'tar job' is averted."

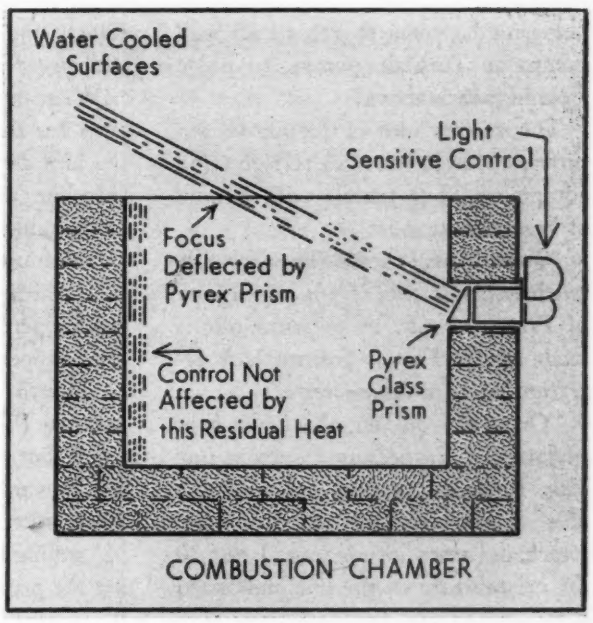
The contestant seemingly has in mind that any of several makes of light-sensitive controls be used in conjunction with the Pyrex prism he uses, but that for some reason it works out better to use the prism than to tip any of the light-sensitive controls upwards to gain the same effect. What about that, you control manufacturers?

Here's the next safety idea of Charles Fisher. As it's based on taking a cue from the current input of the ignition transformer, it might remind Master-Kraft enthusiasts of the Harvey-Whipple Borkontrol, first tested out on actual installations in 1934.

"A frequent demand for service is ignition failure and its attendant 'oil spill.' True, several types of safety controls stop the burner and the oil flow a minute or two after ignition failure, but surely we can do better than that. Most ignition failures result from some functional electrical failure, i.e., an open circuit in the low or high-tension circuits, a short or a ground, low voltage, or a bad ignition point adjustment. In each instance, fuel is sprayed into perhaps a hot chamber for two minutes or more."

Some readers may wonder why this contestant does not use Underwriters listed safety controls. But that's what the man says. He goes on with an explanation of the system, referring to the diagram which appears on page 86.

"I submit a schematic drawing in which a moving core solenoid is connected in series with the ignition transformer primary. Thus when this circuit is energized the core moves to a position corresponding to the emf in the circuit. Like this: With an open circuit in the transformer primary circuit, the core remains at rest in position **A.** *When low voltage occurs the core moves to* **B.** *When a carbon short or ground occurs the core advances to position* **D.** *When a metallic short or*



Charles W. Fisher, *North Hills, Pa., submitted the idea shown by the drawing at the right. He is using Pyrex glass prisms to make light-sensitive controls "see" the boiler's water-cooled surfaces, instead of the backs of the fireboxes. If he's an admirer of the Mercoid Visaflame, there are plenty of service experts who agree with him!*

ground obtains the core advances to position **E**. *Only when the emf of the circuit indicates conditions are perfect for starting will the core move to the position* **C** *over the Microswitch, or any sensitive switch actuating a sensitive relay, permitting the motor to start and oil to flow.*

"Four to six wattts will operate a Microswitch, less for a sensitive switch, so the circuit does not call for redesign of the transformer primary (voltage drop) to operate the moving core. Some men may conclude this is just another gadget to get out of order, but the response from experienced oilburner men corroborates my opinion that including this small control in our equipment will make selling easier, will give safer operation, and will eliminate the nuisance of oil spills."

A few outstandingly practical ideas came from Jerome E. Gleich, 7 Brighton 3rd Road, Brooklyn 35, N. Y.

Here's the first one:

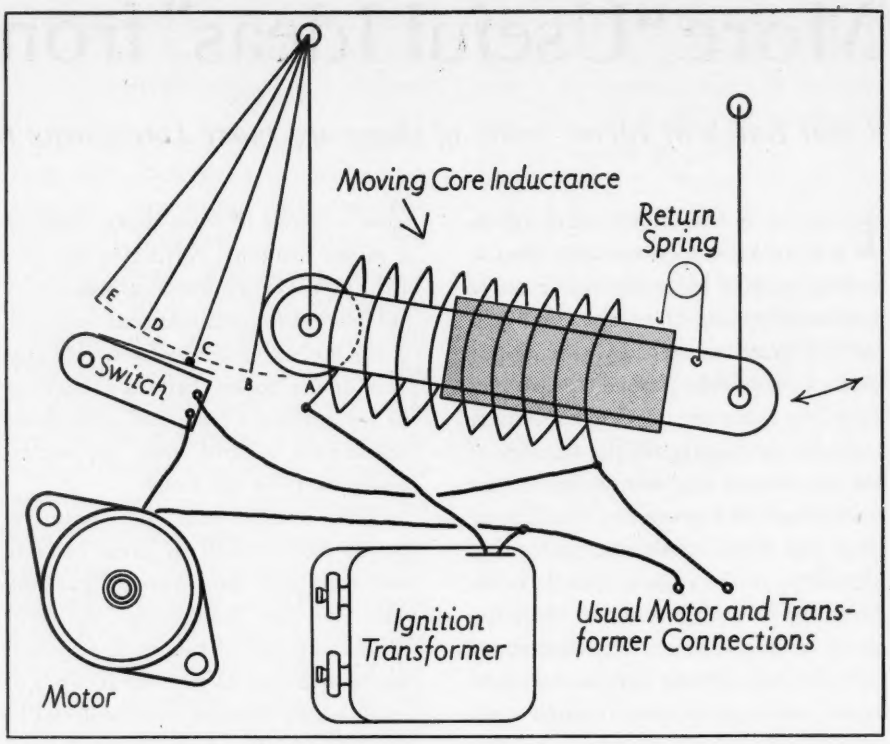
"When a Teesdale pump or ordinary fuel unit is very worn and unable to create sufficient vacuum to pump up oil from the tank, a can of #50 motor oil can be primed or sucked into the pump to develop sufficient vacuum. Once started this way, usually a pump provides temporary heat until you can replace it."

Hasn't he come to regard all wall pumps as Teesdale pumps, to judge from his words above?

This second idea of Jerome Gleich proves to us he services refrigerating equipment, thus travels with a tank of Freon. Here it is:

"Troublesome suction line leaks are much easier to find if you use a tank of Freon 12 gas. A pressure test is made easily. There's positive leak detection using a halide tester.

"On a #6 oil job, the flame kept puffing out. Suspecting a suction line leak, I tried a vacuum test and was able to develop only 10" vacuum, which indicated an air leak. I put 30 lbs. air pressure on the line and tested with soap bubbles but nothing showed up. Then I put on a Freon test, and in five minutes showed up the leak clearly with the halide tester. It was a defect in a strainer housing. After replacing the housing I could get a reading of 28" firing the burner. The flame burned steadily and the problem was licked. From then on, I do all my testing for leaks with Freon and a halide tester."



Charles W. Fisher, *North Hills, Pa., also is responsible for this idea. It's like putting an ammeter in series with the primary of the ignition transformer, and starting the oilburner motor only after getting from the ammeter a reading which you judge is compatible with proper operation of the ignition system.*

Third idea:

"When a foot valve in a tank jams or clogs and can't be opened, use the return line as a suction line and install an external bypass on the burner."

We're not so keen about that one, even for the heavy oil jobs on which the idea can be used because their return lines do run down to the bottoms of the tanks.

The fourth idea from Jerome Gleich is a warning against something that can happen, though probably it seldom does happen. How about this one?

"Fourth, on many no-heat calls, we find the Pressuretrol has thrown out. I find that many service men condemn the Pressuretrols as defective and replace them. Most times we find the ¼" tubing or piping is corroded, locking the pressure in the control. To fix, all it needs is inserting a thin screwdriver or pin through the nipple."

Wouldn't most service men notice that the pressure control snaps "on" when it is removed to install the new control?

We think this fifth, final idea from the same man has to do with horizontal rotary cup burners, though he doesn't say so. He specializes in such burners, to judge from his contest entries. The fifth one:

"Where parts of a defective burner are so worn that the by-pass valve bypasses almost all the oil, not leaving sufficient oil for the flame, a spring-loaded anti-siphon valve installed in the return line will give enough back pressure to run the burner until replacement parts are available."

Fueloil dealers and oil truck drivers will like this contest entry, from Ann Pencheff, 50 Chestnut St., Manchester, Conn.:

"During our winter season when the lay-up of our truck would have been disastrous, our 125 ft. hose was punctured and leaked at about half its length. Our truck had to continue deliveries and we did not have a spare hose.

"Our happy idea for a temporary repair was a simple brass plug arrangement used to repair bicycle tires. Using this saved us from the wrath of our customers. Besides that, all this happened over two years ago, and with the plug and hose still doing service we've so far saved the cost of a new hose."

announcing a new

DETROIT CERTIFIED CONTROL

"Experience Engineered"

INSIDE and OUT!

The New **DETROIT CRC-633**

FUEL TRANSFER PUMP

★ **HEAVY RUGGED CONSTRUCTION**—The best of materials and fine workmanship plus heavy gauge steel for strength, assure long trouble-free service.

★ **NO RETURN OR OVERFLOW LINE REQUIRED**—Use of two switches eliminates need of overflow line. Rugged steel linkages connect floats and switches. Available with half-inch overflow connection if required by local codes.

★ **POWERFUL MOTOR**—Fan cooled to prevent overheating—equipped with easily lubricated, long life bearings.

★ **STAINLESS STEEL VANES**—Equipped with mechanically loaded, stainless steel pump vanes—all pump parts precision-machined for quiet, efficient, long life operation.

★ **STRAINER AND BALL CHECK**—100-mesh monel metal strainer easily removed for cleaning—strainer housing includes ball check to assure holding pump prime during long off periods.

★ **CAPACITY**—Delivery capacity 3 gallons per hour at a 25 ft. lift with No. 1 and No. 2 fuel oil, or Pacific Coast Diesel Oil.

Inside and out, the new DETROIT CRC-633 fuel transfer pump is a truly remarkable advance in the oil burner equipment field. Its many new and outstanding features, resulting from constant year-in, year-out experience in manufacturing oil heating equipment, give positive assurance of quiet, reliable and trouble-free operation. In every way the CRC-633 has been engineered to excel. Contact your nearest DETROIT wholesaler and ask for the DETROIT CRC-633—your inspection will convince you that DETROIT experience, engineering and insight have made it the finest fuel transfer pump obtainable!

DETROIT

LUBRICATOR COMPANY

5900 TRUMBULL AVE., DETROIT 8, MICHIGAN

Division of American Radiator & Standard Sanitary corporation

Canadian Representatives: RAILWAY & ENGINEERING SPECIALTIES, LTD.—Montreal, Toronto, Winnipeg

"DETROIT"

DETROIT HEATING AND REFRIGERATION CONTROLS • ENGINE SAFETY CONTROLS • FLOAT VALVES AND OIL BURNER EQUIPMENT • DETROIT EXPANSION VALVES AND REFRIGERATION ACCESSORIES • STATIONARY AND LOCOMOTIVE LUBRICATORS

Serving home and industry AMERICAN-STANDARD • AMERICAN BLOWER • CHURCH SEATS • DETROIT LUBRICATOR • KEWANEE BOILERS • ROSS HEATER • TONAWANDA IRON

. . . . Useful Ideas

Mrs. Adam Eckert, 231 E. Lincoln Ave., Lititz, Pa., gets some idea-money for coming up with this one, complimentary to the Shell head:

"To get new prospects for oilburners and heating plants, take the burner to the home for a demonstration instead of asking the prospect to your place of business.

"Any salesman can do this with a burner that has the Shell head.

"One of our salesmen had tracks welded in the trunk of his 1941 Dodge coupe. The track can be extended. Mounted on wheels, the burner and combustion chamber roll back and forth easily. An electric cord is run through a door or window of any home to obtain electricity. The flame burns with no smoke, proving its cleanliness and efficiency.

"While the demonstration is being made for one prospect, others are attracted and stop by. Questions are asked and answered, appointments are made, and sometimes sales are closed at once. There's time for talk while the combustion chamber cools. Then it is returned to the trunk and the salesman goes on his way."

Pay-dirt came up for a contestant who works at both sales and service, because of his excellent instructions on servicing pot type water heaters. He knows what he's talking about. There wasn't a contest entry more down-to-earth than this one, or more loaded with the benefits of good, honest, dirty-hand experience on the job. He is Thomas J. Veal, Harbor Beach, Mich., and here's his advice:

"Here the automatic oil-fired water heater is the most practical source of hot water, especially for large families. But sales dropped off alarmingly. The reason, according to my experience, is that a year or so ago we ran into oil not 100% satisfactory for the pot-type water heater. This led to repeat service calls, to the elimination of efficiency, economy, and satisfaction, and resulted in the removal of several units.

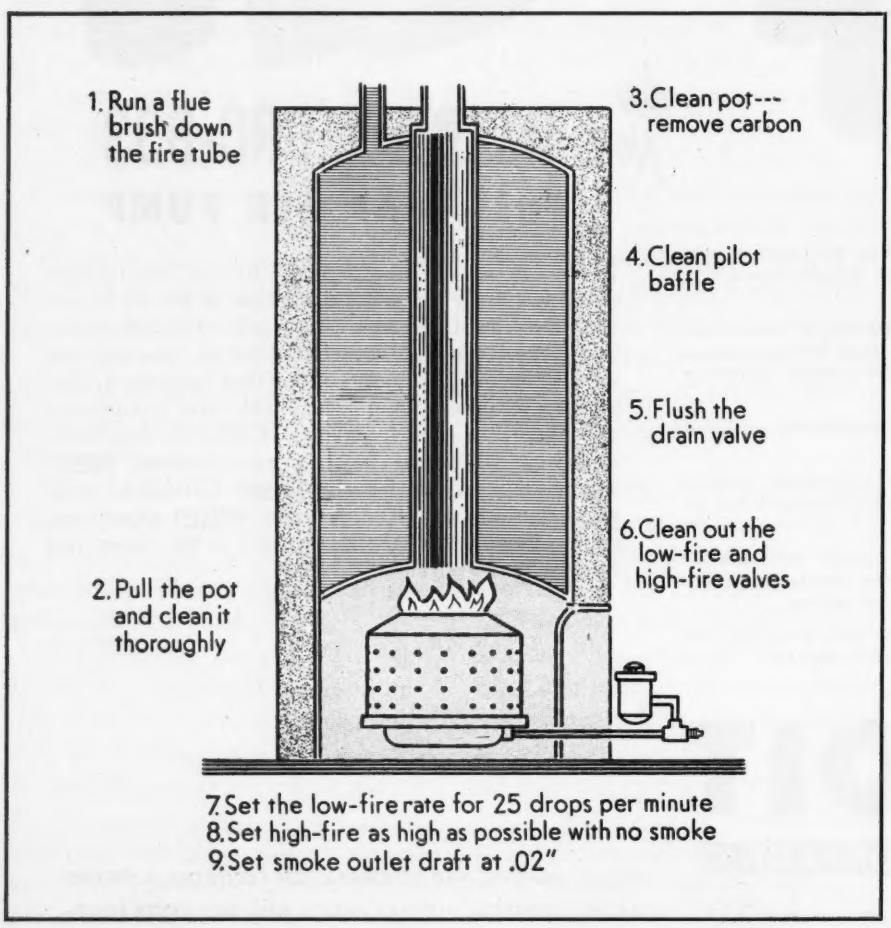
"I have developed a procedure to cope with the difficulty. First, run a flue brush down the fire tube. Then pull the pot. This is important. Always pull the pot and clean it thoroughly. With most water heaters, it takes but a few minutes to do this. Removing the pot enables you to do four things: get rid of the flue soot conveniently, check the pilot baffle, remove the carbon from the pot, and re-light the heater silently. I think all experienced service men know what I mean by my last point. If you drain the pot using the drain tee and don't clean out the carbon, when you re-light the heater it will holler, jump, and smoke, and practically scare your customer out of the house.

"Next flush the drain valve. Then clean out the low-fire and high-fire valves in the constant-level unit using either your own wind or a syringe for blowing out the valve seats. Now check the low fire rate, which I set at 25 drops a minute off the end of the drain tee. But be sure to clean the valves before setting anything. Most heaters operate satisfactorily at 18 drops a minute, but I use 25 because of low draft in summer and lazy chimneys. It simply works out all right.

"Next, you light the heater and set your high fire for the maximum rate of fire that gives no smoke. Measure the smoke outlet draft; set it at .02". That's between the heater and the draft balancer.

"This procedure has eliminated the call-backs I have had in the past. After following these instructions, you can leave the job with the same feeling you have when you leave a new installation.

"By the way, fellow service men, you should be able to go through this entire procedure in about one hour actual time on the job."


1. Run a flue brush down the fire tube
2. Pull the pot and clean it thoroughly
3. Clean pot--- remove carbon
4. Clean pilot baffle
5. Flush the drain valve
6. Clean out the low-fire and high-fire valves
7. Set the low-fire rate for 25 drops per minute
8. Set high-fire as high as possible with no smoke
9. Set smoke outlet draft at .02"

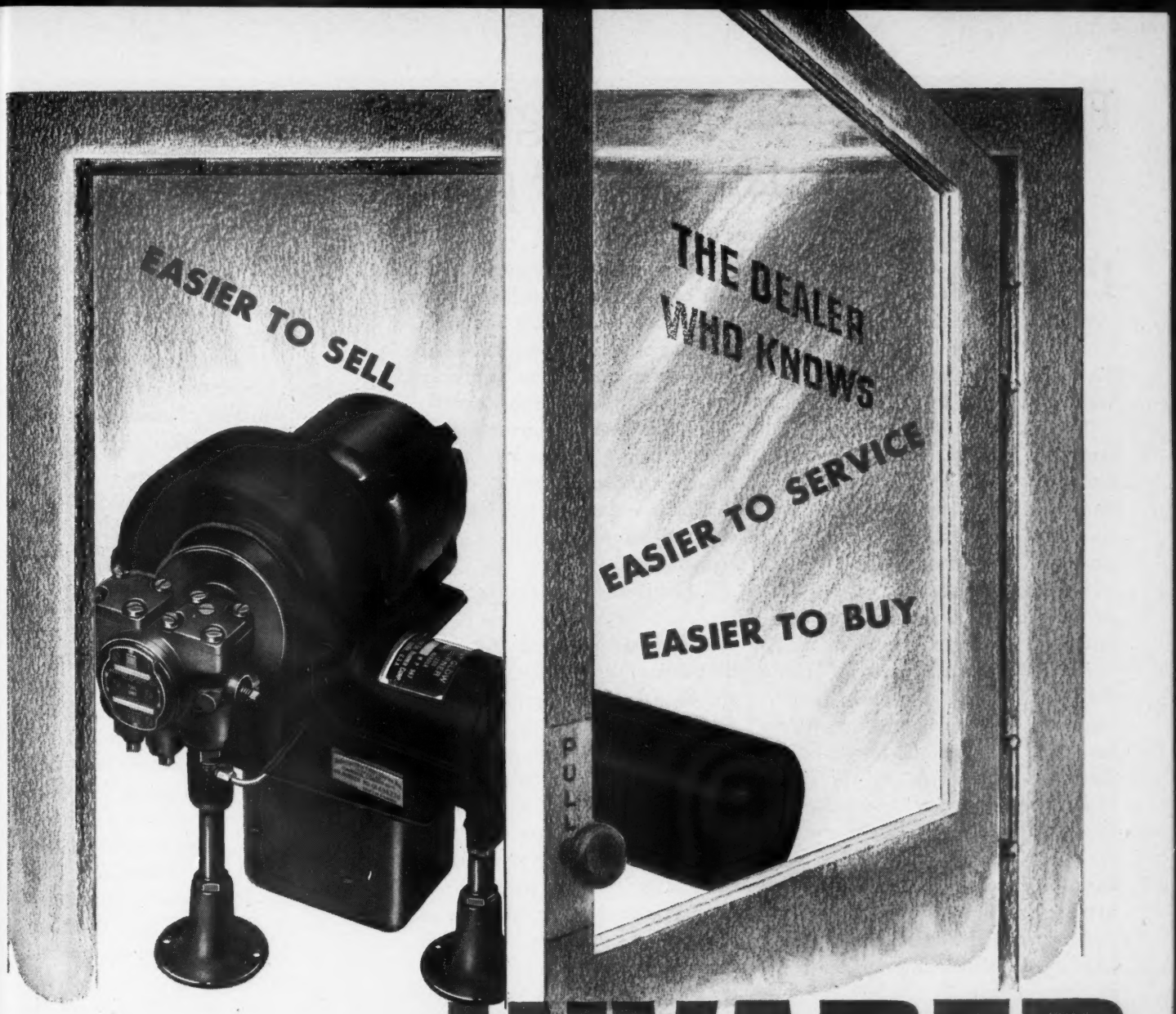
Thomas J. Veal, *Harbor Beach, Mich., tells how to service pot-type water heaters thoroughly, and in one hour. He knows how because he does it as part of his everyday work. Besides, he doesn't do a bad job of drawing up foolproof instructions for other service men! The drawing at the left covers his main points.*

Here's a money-winning idea from Mr. Moses J. Murphy, 41 S. Quaker Lane, West Hartford 7, Conn.:

"My plan is centered on the problem of summer clean-ups. How to obtain a quick return of contracts, and the most efficient methods for fulfilling them.

"Usually too much time elapses between the date a customer receives his contract and the date it is signed and

(Please turn to page 173)



SILENT GLOW INVADER

OPENS YOUR DOOR TO *EASIER SALES*

Silent Glow's INVADER is the pass-key to profits for many dealers from coast to coast. *Easier to sell* . . . because of lower first cost, lower-service cost, lower fuel cost. *Easier to service* . . . INVADER'S one-piece top, automatic alignment of parts . . . simplified, *stay-serviced* servicing. *Easier to buy* . . . INVADER has the quality and price to appeal to thrifty pockets. That's why dealers who know are selling more INVADERS . . . and making bigger profits. For details on opening *your* sales door . . . *write today*

MONEY BACK GUARANTEE

Those Who Know Choose SILENT GLOW OIL BURNERS

This guarantee is backed by the A-A1 rating and reputation of the Silent Glow Oil Burner Corp., a pioneer and leading manufacturer in the oil heating field, with a quarter century background of experience.

To: THE SILENT GLOW OIL BURNER CORP.
850 Windsor Street, Hartford 5, Connecticut
1500 So. Western Ave., Chicago 8, Illinois

Send us the complete story about "Invader" including prices and yo money-back guarantee.

Name _____

Company _____

Street _____

City _____ State _____

Fuel Oil Foundation Program To get underway in Spring

PRELIMINARY ORGANIZATION and fund raising has progressed sufficiently so that campaigns sponsored by the Fuel Oil Foundation, New York 17, N. Y., are expected to get underway actively this Spring in many areas.

The foundation was established last August by the Atlantic Coast Oil Conference to assist groups of dealers in local areas to promote oil heat as "the best heat." A study conducted by the Conference had indicated that the fuel-oil industry can successfully strengthen its operating and sales practices and meet both present and changing conditions in its competitions with other fuels, notably gas. The study recognized the underlying problems that have to be improved and corrected. In the first place, some retailers have failed to do everything possible to assure satisfaction to their customers and the industry, as a whole, has failed to sell the basic fact that oil heat is superior to other kinds of heat.

As a result the Foundation formulated a promotional campaign based on the premise that oil, as a fuel, is fully as clean, convenient, dependable and automatic as any competitive fuel and offers the additional features of reasonable cost, safety, assured supply and the freedom to purchase fuel from a company of the homeowner's choosing. The 4-point program has been worked out to accomplish these objectives:

1. Development of higher standards and practices within the industry so oil customers will stay satisfied.
2. Sales and service training to provide the industry with more capable manpower.
3. Cultivation of the potential market.
4. Advertising and education to tell the public of the advantages of oil heat, and to make and keep the fueloil industry popular.

The Foundation, supported by an endowment fund subscribed to by independent primary suppliers and others, pays for the cost of operating the program, for the production of basic advertising and public relations work. It assists local groups to organize and helps them sell the "4-Point Program" to all members of local industry and to civic leaders. Working with the local committee the Foundation helps to promote satisfactory industry practices, to secure passage of sound codes and ordinances, to recruit manpower and to arrange for training.

The training is carried out through a special arrangement with the Walter Hervey Junior College, New York City, whereby selected students receive intensified instruction in basic salesmanship and the theoretical and practical aspects of oil heat selling. The course includes essential technical instruction in various burner types, training in the making of heat surveys, prescribing the right installation and closing sales.

The principal expense incurred by the local group participating in the program is for local advertising. Basic preparation costs are paid for by the Foundation and the money that the group raises locally goes only for local coverage, such as newspaper advertising, literature, decalcomanias, mass meetings and other promotion. Funds for these purposes are subscribed by members of local industry on a basis determined by each group, but which preferably bear a relation to the size of the business of each member.

Kirk B. Shivell, advertising counsellor, who supervised preparation of the material available from the Foundation, in commenting on the program, points out:

"The competitive situation of the fueloil industry varies widely in different regions along the Atlantic seaboard. In some, gas is not a serious competitor and it is unlikely that it will be for some time to come. In others, gas either is an imminent threat or has already begun to make alarming advances.

"Accordingly, the policy of the Fuel Oil Foundation is to first put its program into effect in those areas where the need is most critical. In the belief that it is of primary importance to protect the position of oil in the New York harbor region, the nation's best heating

Why should we take less
Clean!
like money in the bank
one time when the Best is the Cheapest!
MODERN OIL HEAT
only oil gives all nine!
SAVE UP TO 00% WITH OIL HEAT!
FUEL OIL FOUNDATION
"we buy where we please! ...and stay pleased!"
enjoy MODERN OIL HEAT America's Best Automatic Buy!
This is the finger
WARM and SAFE!

Advertisements *prepared by the Fuel Oil Foundation for use by local dealer groups. Each highlights one of the features of oil as a fuel, with a list of nine such features appearing prominently in every advertisement. The central portion of the illustration is a reproduction of a complete layout, with the upper portions of seven others arranged around the perimeter to show how the theme for each is established.*

Meet a new member of this fast-selling family...

the KO-Z-Aire 140 Winter Air Conditioner

THIS ruggedly-constructed, handsomely-finished 140 Series is KO-Z-AIRE's latest addition to the warm air heating line that's "stealing the show" with both dealers and home-owners.

For here, as in all models, KO-Z-AIRE engineers have outdone themselves to give you faster, easier sales, incorporating smart Advance Design styling into a factory-assembled, easy-to-install unit, with automatic controls, one piece, dust-leak proof welded steel base, and removable clean-out panels.

And you'll find a full range of sizes in both gas and oil-fired gravity and forced air equipment priced to sell — backed by new marketing policies which assure faster, more experienced service to distributors and dealers.

Much else goes with KO-Z-AIRE units to assure dependable, trouble-free, economical operation—minimized servicing problems. So, better not stop with looking, better send today for complete details about KO-Z-AIRE's Progressive Profit Program for dealers. Sure as sunrise, you'll be money ahead in years to come.

Gas and Oil Fired Units from 70,000 to 450,000 BTU Input Available. Some Choice Dealer and Distributor Territories Still Open . . . Write Today!

Visit Booth No. 138-139 at the
NATIONAL OIL HEAT EXPOSITION — April 2-6

KO-Z-AIRE

KO-Z-AIRE, Inc., Dept. FO-3, GENERAL OFFICES — RED OAK, IOWA • REPRESENTATIVES IN PRINCIPAL CITIES

market, the Foundation already has introduced its program to many of the dealer groups in those areas, which include metropolitan New York, South Jersey and certain upstate New York areas, such as Rochester and Syracuse.

"Since the program calls for cooperative expenditure and action by the fuel-oil distributors in each area, the first problem for distributors is to organize and raise local funds. Organization and fund raising have progressed sufficiently so that it should be possible for the program to be actively in operation in many of the critical areas this Spring. In addition, the Foundation is ready to extend its assistance to distributors in other areas who wish to get the program into effect as soon as possible.

"One point that the Fuel Oil Foundation cautions against is the evident feeling of some distributors that oil-heating can successfully overcome competition by means of advertising and promotional effort alone. On the contrary, this may be a waste of money and effort in many areas unless members of the local industry also work conscientiously to improve standards and practices of operation. It is futile to tell the public that oil heat is best unless the industry truly does everything necessary to make it the best."

❖

Praises safety Element Of Snow melting Coils

THOUSANDS OF ACCIDENTS resulting from falls on icy pavement can be averted through the installation of snow melting coils in sidewalks and roadways, says R. E. Moore, vice president, Bell & Gossett Co., Morton Grove, Ill. Mr. Moore explains his company has received many inquiries about snow melting installations in the wake of the blizzard that recently hit the middle west.

The systems can be designed to melt snow merely by keeping the driveway or walk surfaces above freezing by circulating an anti-freeze solution

Workman installing *snow melting coils in the driveway of a home. Coils are anchored on a sand base and covered with concrete.*

GENERAL FUEL OIL FILTERS—THE BEST for your customers . . . and for you

DELUXE MODEL 2A-300
Best for large systems or for dirty storage tanks.

MASTER MODEL 2A-700
Built for the average to large size heating system.

STANDARD MODEL 1A-25
More than adequate capac ity for small homes, space, and hot water heaters.

UNDERWRITERS' LABORATORY. Re-examination Service Listing means dependability—and customer confidence.

THESE *GENERAL* FEATURES INSURE A CLOG-FREE FUEL SYSTEM — FEWER SERVICING WORRIES FOR YOU — GREATER SATISFACTION FOR YOUR CUSTOMERS:

1. All-wool, large-surface cartridge used in 1A-25 and 2A-700, provides fine filtration and removes moisture due to condensation. The wire-mesh strainer inside the wool felt gives double protection. No more customer dissatisfaction from shut-downs due to clogged nozzles — no more costly "call-backs" to run up your service costs.

2. Easy-to-insert cartridges that insure clean oil. Every *GENERAL* filter installed means regular repeat business on cartridge replacements.

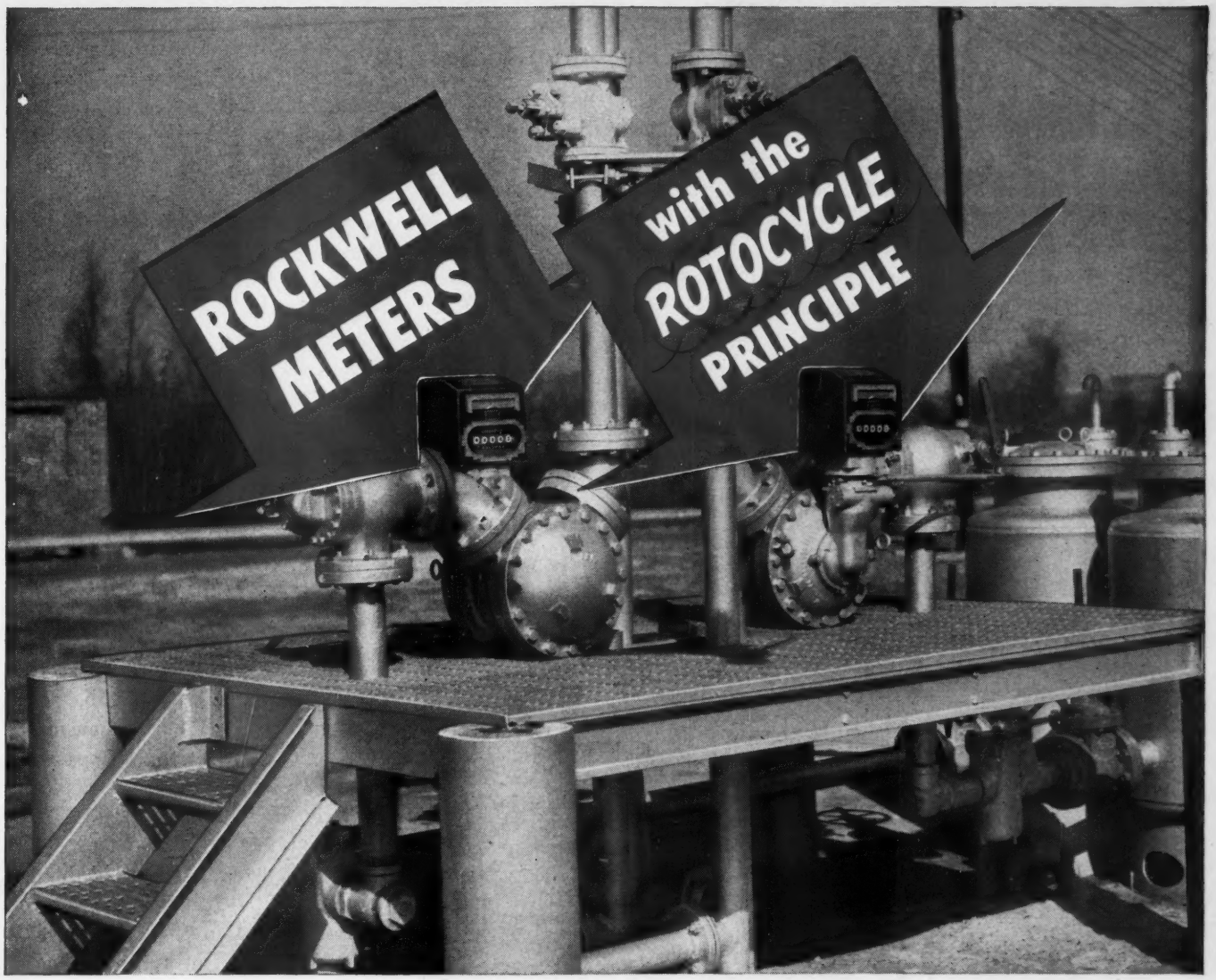
3. There's a *GENERAL* model for every system, large or small, Gravity or Pressure burner.

4. Original unit cost is low, installation is easy, and sturdy metal construction guarantees LIFE-OF-BURNER service.

GENERAL FILTERS INCORPORATED — 12890 WESTWOOD AVE. DETROIT 23, MICHIGAN

CANADIAN FACTORY BRANCH: CANADIAN GENERAL FILTERS, LTD., 2679 DANFORTH AVE., TORONTO 3, ONTARIO

See GENERAL'S exhibit at Booth 244, Nat'l Oil Heat Exposition, Navy Pier, Chicago, April 2-6.



Neat as a pin . . . clean as a hound's tooth

Rockwell Rotocycle meters are made in types and sizes to suit every petroleum measurement requirement—bulk station, tank truck or pipe line.

Whether you operate only a two outlet loading rack or a giant with 24 or more, you will get the cleanest piping—the most workable platform when you use Rotocycle meters. That's because of the flexibility with which these meters can be hooked up. Registers (either straight reading or printers) can be turned to any of four positions, 90 degrees equi-spaced. Meter outlets can be placed at right angles to the line or inlet and outlet may be in a V position as shown in the above picture. Even the register extension is adjustable in relation to the other meter components. These options, found only in the Rotocylce meter design, conserve space, eliminate costly pipe bends and keep "on-the-job" pipe fitting to a minimum.

All this adds up to *money saving* installation ease and *money earning* operating convenience. Write today for complete facts about Rotocycle meters and engineering data on their efficient application.

ROCKWELL MANUFACTURING COMPANY

PITTSBURGH 8, PENNSYLVANIA

Atlanta Boston Chicago Columbus Houston Kansas City Los Angeles New York Pittsburgh San Francisco Seattle Tulsa

heated to 100 degrees Fahrenheit. Tests have shown that such an arrangement can melt over 1" of snow an hour. Mr. Moore explained that coils for this purpose can be installed for from $300 to $500, depending upon the size and conditions, and can be operated at a fuel cost of as low as 10¢ an hour for the average home.

Manual or automatic operation is possible, with an electric eye or snow collector operated switch available to automatically circulate the solution through the coils when falling snow reaches the level for which the controls have been adjusted.

Last Year was best Homebuilding Year

THE 95,000 NEW PERMANENT nonfarm dwelling units begun in December 1950 brought the year's total to a record-smashing 1,400,000 units, according to preliminary estimates of the U. S. Labor Department's Bureau of Labor Statistics. The total exceeded 1949's record volume of 1,025,100 units by 36% and was almost 50% ahead of the previous peak of 937,000 units in 1925.

Last year opened with 78,700 new dwelling units started in January, continuing the pace which began in the last half of 1949, and reached a peak of 149,100 starts in May. Autumn home construction slackened somewhat as a result of curbs on housing credit, but the 11% increase in December surpassed any previous total achieved during that month in previous years. This increase probably was caused in part from postponement in November of some building activity until December, when more favorable weather conditions prevailed, according to the Bureau, and also was boosted by 14,800 public housing starts. These included all units in federally aided projects for which Public Housing Administration proceed orders were effective in December.

Single family Emphasis

An extraordinary rate of single-family house construction marked the year, with an estimated 1,156,000 begun in 1950, or 83% of all new dwelling unit construction, as compared with 77% of the total in 1949. Rental type housing declined from 23% of starts in 1949 to 17% in 1950. Cost of private 1-family houses in the first quarter of 1950 averaged $7,850, against $7,525 in 1949 for the same months, but by the third quarter of 1950 it had risen to $8,975, or $1,350 above the figure for the corresponding quarter the year before. These figures include all costs except land and development costs or profit on the sale of the house.

The index of wholesale prices for all building materials rose 13% between January and November 1950 and average hourly earnings for building construction workers passed the $2 mark in July 1950 and have continued to advance each month. In November 1950 they were 8% higher than the same month in 1949.

New housing starts in urban areas, about 827,000 units, were up 40% from the 1949 volume and the 569,000 new rural-nonfarm dwelling units begun was a 30% gain. Urban housing accounted for 59% of all new home construction in 1950, 57% in 1949. Public housing was up 17% over 1949, with the Federal Government participating in about 65% of the 42,600 unit total, up from 13% in 1949.

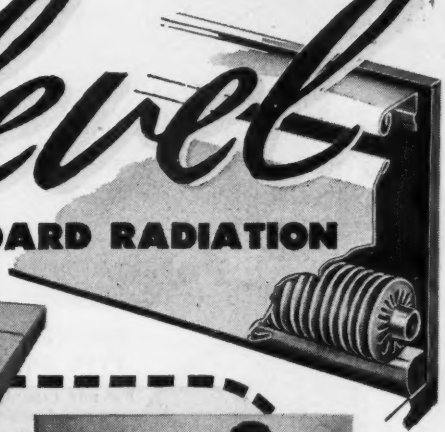
HOW ABOUT THAT?
ASK OSCAR... THE OIL-BURNER DEALER...TO JOIN THE OIL HEAT INSTITUTE AND HE'LL HAND YOU MORE EXCUSES THAN YOU CAN SHAKE A STICK AT!
THE INSTITUTE HELPS YOU A THOUSAND DIFFERENT WAYS! YOU GET SALES PROMOTION MATERIAL, FINE POSTERS, CAMPAIGNS FOR GREATER PUBLIC ACCEPTANCE OF YOUR PRODUCTS, TRADE REPRESENTATION IN WASHINGTON AND COUNTLESS OTHER BENEFITS! WE SHOULD ALL BAND TOGETHER TO SURVIVE....IN OUR TOUGH, COMPETITIVE OIL HEATING INDUSTRY!
LISTEN, I CAN RUN MY OWN BUSINESS!! BESIDES.... THERE'S NO HELP THE INSTITUTE CAN GIVE ME, THAT I CAN'T GIVE MYSELF FREE OF CHARGE!! SORRY... NOT INTERESTED!
OIL HEAT
J.H.T. ELMO
BUT.... WHEN THINGS GET TOUGH AND THE GOIN' IS ROUGH.... JUST LISTEN TO BROTHER OSCAR'S TUNE!
WE ONLY SOLD TWO BURNERS THIS WEEK, CHIEF! SEEMS EVERYBODY'S FLIRTING WITH THAT NEW GAS-BURNER OUTFIT ACROSS THE STREET! WE GOTTA' DO SOMETHING TO STIMULATE SALES SOMEHOW!
THAT'S THE TROUBLE WITH OUR BUSINESS! THERE'S NO TEAMWORK....NO GUIDING HAND...NO COOPERATION AMONG US! IF WE'D ALL STICK TOGETHER TO HELP EACH OTHER OUT, THEM BIG FELLERS COULDN'T SWALLOW US ONE BY ONE!!
SEND IN YOUR "HOW ABOUT THAT" IDEA FOR ILLUSTRATION! YOU'LL RECEIVE CREDIT AND ORIGINAL DRAWING

√CHECK THIS PROFIT PACKAGE!

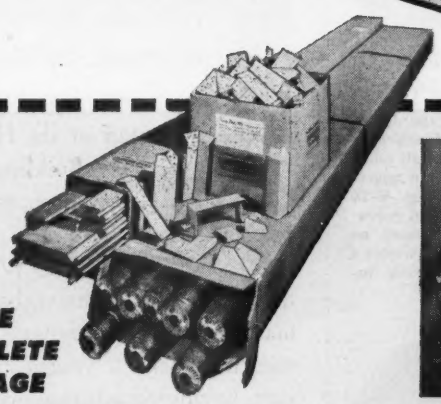
The lowest cost hot water heating system. Packaged complete (in 6 sizes from 200 to 366 sq. ft. of radiation), with baseboard fittings to eliminate stocking dozens of items. All you need know is how much radiation is needed . . . complete system is shipped ready to install. Scientifically sized and tested by factory engineers.

floorlevel

HOT WATER BASEBOARD RADIATION



The Floorlevel package consists of fin-type heating element, front panel, top moulding, wall brackets, inside corners, outside corners, end terminals and splices. Packaged in convenient 10 foot lengths. Fin on ¾" copper tube heating element. Capacity 500 BTU per linear foot per hour at 200° water temperature . . . or the equivalent of 3 ⅓ sq. ft. of radiation.



ALL-IN-ONE COMPLETE PACKAGE

√ EASY TO *SELL*
With Demonstration Kit

√ EASY TO *HANDLE*

√ EASY TO *INSTALL*

DE-AIRATOR TANK

A "MUST" For Hot Water Baseboard Heating Systems. A positive eliminator of air.

SEND FOR SPEC. 56
Find out how you can cash in on this profit package ...NOW!

VISIT BOOTHS 107-8-9
O. H. I. SHOW CHICAGO APR. 2-6

GENERAL AUTOMATIC

GENERAL AUTOMATIC PRODUCTS CORP., 2300 Sinclair Lane, Baltimore 13, Md.

MFGRS. OF A COMPLETE LINE OF OIL & GAS FIRED HEATING EQUIPMENT

Fuelsite oilheat

OHI Booklet provides Ammunition for Oilheating

A 12-PAGE BOOKLET, prepared by Oil-Heat Institute of America and distributed to its members, has been designed as an outline for selling the advantages of oil heat against gas heat. Entitled "Sales Ammunition Oil Heat vs Gas Heat," the booklet begins with a brief history of the transition from the time when oil heat had "no competition" to the present when it has moved into direct competition with gas heat in almost all areas.

The first section discusses "Appeals that sell oil heat," and presents a resume of facts about six of them that can be worked into a sales story. The six reasons why oil heat is best are shown as greater comfort, greater convenience, saves money, greater sanitation, added safety and added security.

"How to handle resistance to oil heat" enumerates and refutes 8 common objections that a prospect might raise to oil heat during a salesman's presentation. This then is followed by a similar section that tells "How to answer arguments for gas heat." Here 9 arguments are presented, along with simple, understandable facts that the salesman can present to discount them and explain how oil heat is equal, and, in many cases, superior.

While the booklet is not intended to be a treatise on selling and selling methods, it does conclude with the observation that knowledge and enthusiasm are "among the greatest deficiencies in oil heat selling efforts." Knowledge about oilheating, it explains, not only gives substance to the sales story but instills confidence in the salesman. "Know the facts," the booklet advises, "and have some advance idea of how you will present them so that they will be readily understood and convincing." Genuine enthusiasm for automatic oil heat is regarded as equally important and is described in the booklet as the "priceless ingredient in every successful presentation."

The booklet offers authoritative and convincing data that can be readily used as a nucleus for working up effective sales ammunition for automatic oilheating.

❖

New Officials Added to Heating Section, NPA

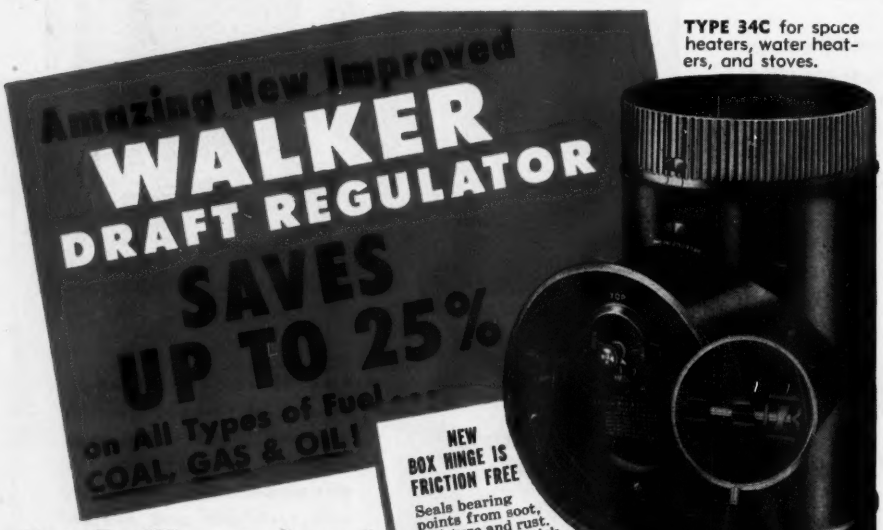
THREE ADDITIONAL men have been added to the staff of the Heating and Plumbing Section, Building Materials Div., NPA, Washington, each of them to be in charge of a unit.

Morgan Johnson, a WPB official during the war and subsequently a manufacturers representative, has been named to head a Warm Air Heating unit, having jurisdiction over furnaces, blowers, ducts, and the like.

Hugh Woll, from Standard Sanitary, is to mastermind the Plumbing Unit. John McKinnon, formerly with L. J. Wing Mfg. Co., will be in charge of the Extended Surface Heating Unit.

❖

Sumner W. Cole has been employed by the Cleveland sales district of Perfection Stove Co., Cleveland 4, Ohio, to travel the northern Michigan territory.


Amazing New Improved
WALKER
DRAFT REGULATOR
SAVES
UP TO 25%
on All Types of Fuel...
COAL, GAS & OIL!
NEW
BOX HINGE IS
FRICTION FREE
Seals bearing points from soot, moisture and rust. Won't clog or stick. Maintains positive draft values exactly as adjusted.

TYPE 34C for space heaters, water heaters, and stoves.

Over 7 million now in use!

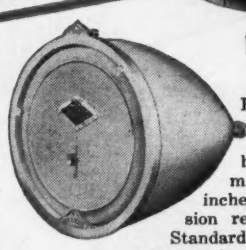
Yes, now you can save up to one-fourth on fuel cost and get *more* efficient heating performance. The new, improved, automatic Walker Draft Regulator assures maximum fuel combustion under *all* stack conditions. This means *even* heating and prevents unnecessary heat loss up the chimney. It's quickly installed, easily adjusted, and low in cost.

Manufacturers can improve the performance of their heating equipment by specifying Walker Controls.

There's a Walker Regulator to fill every need, too ... from a small stove to a giant industrial boiler. Each is factory tested ... each guaranteed to give positive automatic action.

WALKER MFG. & SALES CORP.
St. Joseph, Mo.

World's largest factory producing Automatic Draft Regulators exclusively ... not competing either directly or indirectly with producers of any type heating equipment.



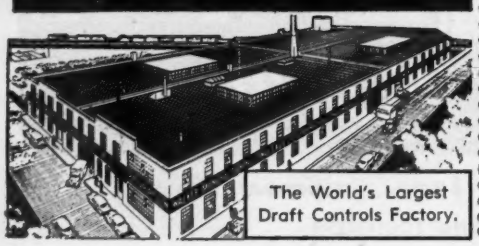
WALKER TYPE 34

For any type of domestic furnace in stores, small office buildings and apartments. Sizes 6-20 inches. Rust and corrosion resistant. Listed as Standard by Underwriter's Laboratories. Shown with installation collar.

COMMERCIAL and INDUSTRIAL

(Ball Bearing) Built to meet toughest conditions. Sizes 16-36 inches. Ideal for power plants, schools, garages, industrial plants, laundries... Thousands in use!

WALKER Automatic DRAFT REGULATORS



Walker Manufacturing & Sales Corp.
17th & Penn St., Dept. 206,
St. Joseph, Mo.

Please send me more information on the full line of Walker Automatic Draft Regulators. No obligation, of course!

Name_____

Firm_____

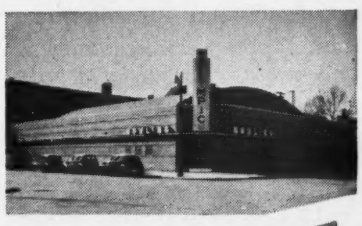
Address_____

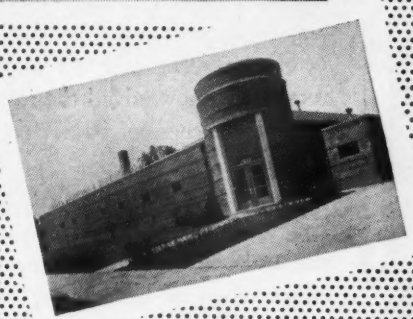
City_____ St._____

JACKSON & CHURCH

warm air heat

Cuts costs . . .
Saves critical materials





Cut the high cost of heating! Compare advantages and savings of Jackson & Church Warm Air Heat against natural convection heat and see why dealers, builders and architects are able to cut costs and conserve critical materials.

In addition to lower installation and operating costs, Jackson & Church Warm Air Furnaces offer many other money-saving advantages. In most cases, warm air heat PLUS summer air-conditioning can be had for the same approximate cost as convection heating alone.

Over 100 J-C models are available in a range of sizes from 50,000 Btu to 3,800,000 Btu output . . . designed to provide dependable, healthful heating for every residential, commercial and industrial use.

For the more difficult heating installations, our engineering department is at your service to assist with heating plans. If you are interested as an architect, as a dealer, builder or consumer, write today for further details.

SEE AMERICA'S LARGEST AND MOST COMPLETE LINE OF SUSPENSION HEATING EQUIPMENT IN BOOTH 205 AT THE O.H.I. SHOW, NAVY PIER, CHICAGO, APRIL 2-6.

J-C Installations Were Chosen For These Buildings In The Midwest Area

SEE OUR CATALOG IN SWEET'S

. . AMERICA'S LARGEST AND MOST COMPLETE WARM AIR HEATING LINE . . .

MEMBER WARM AIR HEATING & AIR CONDITIONING

J-C JACKSON & CHURCH CO.

SAGINAW, MICHIGAN

WORK WELL DONE SINCE '81

Fuel Oil and Oil Heat

National Petroleum Council Names two Committees

APPOINTMENT OF A COMMITTEE on February 1 by Walter S. Hallanan, chairman, National Petroleum Council, on Capital and Materials Requirements for Increasing Availability of Petroleum Products, marked a step toward meeting military and civilian needs for an additional one million barrels daily. Preliminary studies by the Department of Interior had indicated that in the event of war there would be a sharp increase in the demand for petroleum products to meet military and essential requirements which would require large quantities of capital and materials.

The Council unanimously approved the government's request to study the matter and named Dr. Robert E. Wilson, chairman of the board, Standard Oil Co. (Indiana), to act as chairman of a 23 man committee. Others appointed included: Fayette B. Dow, National Petroleum Association; Eugene Holman, Standard Oil Co. (N. J.); B. Brewster Jennings, Socony-Vacuum Oil Co.; W. Alton Jones, Cities Service Co.; Frank M. Porter, American Petroleum Institute; W. S. S. Rodgers, The Texas Co. and J. Ed Warren, Independent Petroleum Association of America.

Another Committee on Oil and Gas Industries Manpower also has been selected to study and present facts about manpower requirements of the petroleum and gas industries along with appropriate recommendations. The committee is headed by W. W. Vandeveer, Cleveland.

Fulflo FILTERS
REG U.S. PAT OFF

CHOOSE WISELY . . .

Now is the time to choose the Oil Burner Filter you will use for the coming season, both on overhauls and new installations.

- You can't go wrong if you choose the Filter that outsells all others. FULFLO Filters lead all others in sales because they lead in performance.
- Dealers everywhere have found that its exclusive Honeycomb Filter Tube makes FULFLO the most effective Filter for eliminating costly service calls. True depth filtration removes all rust, scale and dirt down to miscroscopic size . . . prevents fouled points, clogged nozzles, scored pumps, stuck valves and all service troubles caused by minute impurities in heating oil.

Choose wisely . . . Choose FULFLO!

See them at Booth 427 at the Chicago Show

RF4 HONEYCOMB FILTER REFILL TUBE

Six in counter carton with gaskets and instructions. Fits all 4-inch Fulflo Filters. Stocked by more jobbers and dealers than any other refill.

IF YOUR JOBBER CAN'T SUPPLY YOU WRITE OR WIRE US

COMMERCIAL FILTERS CORPORATION
BOSTON 27, MASSACHUSETTS

What Advertising does For oversold Product

PRINTERS' INK, advertising, management and sales magazine, recently asked its Jury of Marketing Opinion, composed of advertising managers and directors, "What are the functions of advertising when the product is oversold?" The question was broached to find out the plans of a cross section of advertising executives, recognizing that many have formulated two sets of advertising plans for 1951. One of the plans would be used if conditions remain as they are and the other would be followed if sudden changes in the international situation result in more stringent controls and restrictions, or force a complete diversion of production from consumer to war goods.

The answers received almost universally acknowledged the importance and effectiveness of advertising not so much for the immediate moving of a particular product but rather for the long range objective of creating a desire and convincing a prospect to buy either when he is ready or when the product again is available.

The following thirty functions of advertising when the product is oversold were suggested by members of the Jury of Marketing Opinion:

1. Insure consumer good-will and acceptance of brand name and products when a buyers' market returns.
2. Keep geared up so as to be ready for a *sudden* buyers' market.
3. Build up quality values of a product as a hedge against future price competition.
4. Protect financial value of good-

The woods are full of heating equipment dealers who thrive while "conditions" are good and starve when they're bad. Timken Silent Automatic Dealers are a different breed of cat.

They've got what it takes to *make their own* "business conditions." For one thing, they've got the years-ahead Timken Silent Automatic line of heating equipment for oil, gas and coal—different in design, different in construction. Consistent, hard-hitting, year-around advertising has educated America to the fact that Timken Silent Automatic is the *Number One Name* in automatic heating. Hundreds of thousands of satisfied users keep singing the praises of the fuel-saving *wall-flame* method of heating.

When business conditions fall off, Timken Silent Automatic Dealers *still sell* in volume and at a *healthy profit.* They're in business *to stay.* If that kind of future sounds good to you, better take a look at the Timken Silent Automatic franchise!

A few choice sales territories are now open.
Write today for full franchise details!

TIMKEN SILENT AUTOMATIC DIVISION

The Timken-Detroit Axle Company • Jackson, Michigan

PLANTS AT: DETROIT AND JACKSON, MICH. • OSHKOSH, WIS. • UTICA, N. Y. • ASHTABULA AND KENTON, OHIO • NEW CASTLE, PA.

will purchased by large investments in advertising in the past.

5. Speed up a trend that can be taken advantage of in normal times.

6. Create acceptance of company as public-spirited, friendly, sound, etc., through institutional advertising.

7. Maintain dealer relations when product flow becomes a trickle and salesman contacts are reduced.

8. Maintain good relations with a large number of small customers when forced to cater to fewer larger customers.

9. Keep a promise of advertising support made to dealers before the product became oversold.

10. Create consumer desire for a product purchased by wholesalers and retailers in larger than normal quantities.

11. Locate and sign up new and better dealers.

12. Take on assignments that are usually lost in the rush of immediate sales—such as illustrating the completeness of the line.

13. Experiment with a new item and test its future possibilities.

14. Establish a brand economically when competitors and other advertisers are off the market.

15. Explain shortages to dealers and consumers.

16. Tell how substitute materials are proving out, paving the way for their acceptance on a permanent basis.

17. Spread the news of new industry inventions.

18. Ward off competition from new sources, including other industries, at a time when consumers have money to spend but can't spend it on your product.

19. Show customers how to get longer life out of your products.

20. Take advantage of the close reading advertising gets at a time when people have more money and less to spend it on.

21. Hold, and if possible better, space and time advantages.

22. Locate customers and markets with high priority ratings.

23. Show manufacturers how to make more efficient use of present plant, equipment, materials and labor.

24. Show consumers, the trade and manufacturers how to cut waste.

25. Maintain contacts with executives in plants that are in restricted areas where salesmen can't call.

26. Contact replacement personnel during a time of crisis when buyer turnover is stepped up.

27. Spread information about all types of products in as wide a sphere as possible in the hope that someone will get an idea of some way to adapt the product to the furtherance of the defense effort.

28. Establish craftsmanship of American products at a time when well-established foreign products are cut out of the market or when foreign products have entered the market as substitutes.

29. Gain reasonable acceptance of one style for another where normally a choice of several colors and styles might be available.

30. Work in the national interest to sell bonds, conserve strategic materials, enlist support for worthy charities, and such public service causes as those sponsored by The Advertising Council.

There is only ONE

TRADE MARK REGISTERED

Draft-O-Stat

BAROMETRIC DRAFT CONTROL

AND HOTSTREAM MAKES IT!

OVER ONE MILLION

SUCCESSFUL INSTALLATIONS

New Model "8" (illustrated) now available in 6, 7, 8, 9, 10 and 12 inch sizes. Write for Bulletin.

THE HOTSTREAM HEATER CO.

6925 QUINCY AVENUE • CLEVELAND 4, OHIO

Whatever You Need Luxaire® Can Supply It

Increase Your Sales
Increase Your Profits

Luxaire

The complete line of Heating and Air Conditioning Units for Any Kind or type of Heating Installation

For Gravity, Forced Air or Perimeter Heating

Cast Iron or Steel Heating Element

For GAS * OIL or COAL

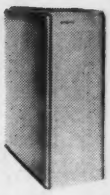
By concentrating your sales efforts and your selling ability, on one well known name and one line of heating equipment, you can increase both your volume of business and the amount of your profits.

By concentrating your purchases on one line of furnaces, you can reduce your inventory and speed up your turnover of capital.

If you concentrate on Luxaire you can follow this formula for increasing profits.

You can follow this formula for increasing profits, because the sales-compelling Luxaire line which is easiest to sell, is also the competitively priced Luxaire line which is easiest to buy.

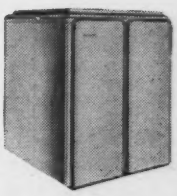
See Your nearest Luxaire jobber for catalogs and prices.



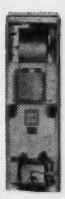
Series A Gas-Fired Steel Air Conditioning Unit.

Series H Gas-Fired, Steel Utility Air Conditioning Unit.

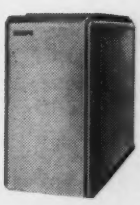
Series G Gas-Fired Gravity Furnace Available with Steel or Cast Iron Heating Element.



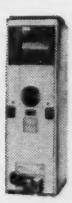
Series CA Gas-Fired Air Conditioning Unit, Cast Iron heating element.



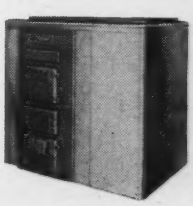
No. HC-95-E Gas Counterflow Unit, for Slab Floor, Perimeter Heating.



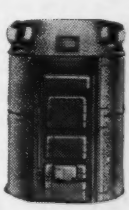
Series O Gun, Oil-Fired Air Conditioning Unit. Steel heating element.



No. VHC-75-E Oil Counterflow Unit, for Slab Floor, Perimeter Heating.



Series AC-F Coal-Fired Air Conditioning Unit. Steel Heating Element.



Series No. 600 Coal-Fired Gravity Furnace. Steel heating element.

Series C Coal-Fired, Cast Iron Furnace.

THE Luxaire C. A. OLSEN MANUFACTURING COMPANY • • ELYRIA, OHIO

HEATING & AIR CONDITIONING UNITS

Fuel Oil & Oil Heat

Factory Man's Blunder

fueloil & oil heat
Short Short Article
on Burner Service

"THREE YEARS AGO and just outside Chicago, I pulled my biggest boner servicing a burner," a factory man said sadly as he sipped hot coffee in a diner at 2 A.M. after a 12-hour stretch of instructing a dealer's service men.

"I'd just graduated from service work to being the field engineer for a big manufacturer, and was mighty cocky about my new job."

The owner of a printing plant had written the factory. As it had no dealer near the owner at the time, the factory told its field man to see the owner about his questions sometime as he drove by that way.

"All dressed up, I bowed and shook hands just like the important engineer from the factory should, and sat down and asked the printer what we could do for him," the factory man went on. "It turned out he had the biggest pipeless furnace in all creation. A duct and a little blower were fitted neatly to this, giving some warm air to two offices off to one side.

"Oil odor with the smokepipe damper closed bothered the owner. He complained he had to keep the smokepipe damper open every morning when he started the burner, otherwise he got oil fumes. All day long, he said, when the burner started for its room thermostat he got oil odors if he didn't hop downstairs and open the smokepipe damper a few minutes, until the chimney got hot and started pulling. He wound up telling me it was not right, it wasn't automatic, to have to keep opening the damper of an automatic burner.

"I was shocked at his ignorance and I showed it plenty. The way I went on, in my pose as the big know-it-all engineer from the factory, the guy got embarrassed over his stupidity. I told him that never in all my years of experience had I met an owner who tried adjusting a smokepipe damper after a burner was installed. This was one for the book, I said. Why the president of the company would break a rib laughing when he heard of this one!

"After telling him clearly never to close the damper again, and to remove it when he got a chance, I made a grand exit acting as though he was a dope who had made me come 300-miles from the factory on a fool's errand."

Two months later, passing through again and having time to spare, the factory man called back at the printing shop. The owner marched him down to the big pipeless furnace. It was burning coal. The burner was gone.

"Why did I take out your burner?" the printer shouted. "It shouldn't run with the smokepipe damper closed, that's why! Following your orders, I left the damper wide open. The burner ran and ran. In ten days I ran out of oil. Checking, I found my oil consumption jumped from 12 to 28 gallons a day. Standing over the furnace, you can feel it gives no heat with the damper open, and loads of heat with the damper closed tight. You can try that for yourself, because it does the same fired by wood or coal or oil."

They put a big blaze of wood in the furnace. Sure enough, the owner was 100% right. Heat trickled up out of the furnace with the damper open, but with the damper tight-closed the blast of heat made them move.

"Making the story short," said the factory man as he finished his coffee, "I dropped my pose as the important man from the factory, got into overalls and got good and dirty, and found out the reason for all this.

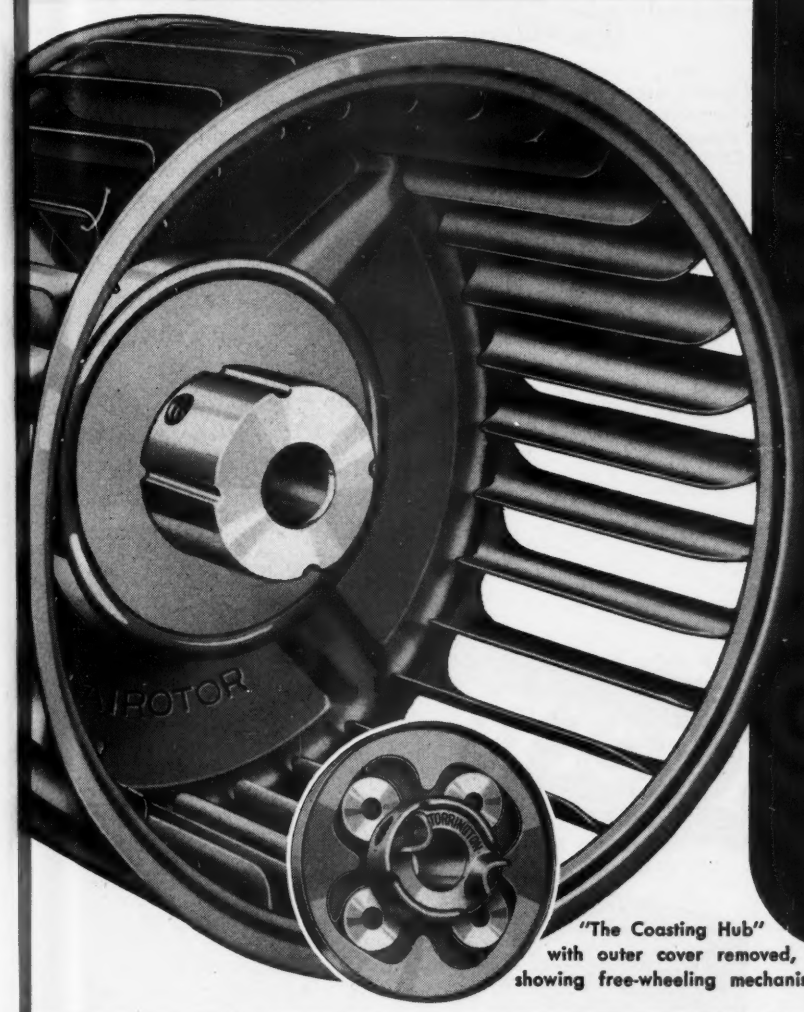
"The top of the furnace's combustion space was shaped like a pointy dome, and a flue-travel channel extended from this dome to the doughnut-like flue passage arrangement. This channel, supposed to steer the hot gases to the flue passes, was entirely gone—all rusted away and burned out.

"With the smokepipe damper open, cold air from the room was sucked into the doughnut flue passes, chilling them and cutting to nothing the heat output of the furnace. With the damper tight-closed, loads of heat poured out of the furnace for an odd reason. The products of combustion actually poured out of the furnace and directly into the room, heating it beautifully. That's why there had been oil odors with the furnace cold and the damper closed.

"The printer gave me hell for not finding the trouble earlier, the time I'd just sat back in a chair and talked like a big executive. He could see now that what he needed was a new furnace."

The printer bought two new oil-furnaces, the factory man concluded, one for the main room and one to heat the offices. But he bought a different make, not the make sold by our friend the factory man.

TORRINGTON'S *Coasting Hub* IS SOLVING THE "AFTER-FIRE" PROBLEM!



"The Coasting Hub" with outer cover removed, showing free-wheeling mechanism.

- Maintains air supply until fire burns out clean!
- Eliminates customer complaints of soot, smoke and s-h-u-d-d-e-r!
- Reduces fouling of electrodes!
- Requires no electrical work to install!
- Goes anywhere a standard wheel is used!
- Fits any standard shaft extension!
- Furnished to drive Lovejoy or Guardian couplings!
- Provides new, *clinching* sales appeal at low cost!
- Every oil burner owner is a natural replacement prospect!
- Built to last a lifetime!

Experience in both the United States and Canada proves that Torrington's Airotor blower wheel with the "Coasting Hub", introduced two years ago, is the simplest and most economical means on the market to improve the performance of fuel oils in pressure-atomizing oil burners! It insures clean shutdown and eliminates shudder.

The cooperation of many oil burner manufacturers in test installations and product refinement make the Coasting Hub *"Better than ever."* Since the Coasting Hub helps eliminate three major faults – soot, smoke and shudder, we suggest you investigate Torrington's "Fan with the Coasting Hub" – your key to more sales and profits.

Attention Dealers! Distributors!

Get new business from the oil burner owners you serve! Eliminate the s-h-u-d-d-e-r they complain about! Just install the "Fan with the Coasting Hub!" It's easy—no structural changes or electrical work.

The TORRINGTON MANUFACTURING COMPANY TORRINGTON, CONNECTICUT

Plumbing, Heating Jobbers Surveyed by Census

ANOTHER PORTION of the 1948 Census of Business released by the Bureau of the Census, U. S. Dept. of Commerce, reports on plumbing and heating goods distributors, whose sales in 1948 amounted to $1,813 million or almost five times the pre-war 1939 dollar volume. Sales of general line plumbing and heating houses were up 557% from 1939 totals, while sales of heating equipment wholesalers increased 386% in the period from 1939 to 1948.

Included in the compilation is information furnished by establishments primarily engaged in selling a diversified line of plumbing and heating fixtures and supplies, air conditioning and ventilating equipment. These data are available by states, but the table below shows national totals.

	General line Plumbing, Heating Houses	*Heating Equipment Wholesalers*	*Plumbing Fixture, Supply Wholesalers*	*Air Conditioning Ventilating Equipment Distributors*	*United States Total*
Establishments					
(No.) 1948	1,963	558	902	325	3,748
1939	675	368	927	255	2,225
Sales entire year* (Thousand dollars)					
1948	1,215,932	175,069	325,501	96,458	1,812,960
1939	185,102	36,058	134,095	24,720	379,975
Operating expenses (1948) % of sales	13.9	17.7	16.0	22.8	15.1
Payroll entire yr. (1948) (Thousand dollars)	99,354	16,253	20,097	13,128	157,832
Active proprietors* Nov. 1948 (No.)	896	260	574	149	1,879
Paid employees, Nov. 15, 1948 (No.)	27,208	4,467	7,890	3,816	43,381
Stocks on hand end of 1948 (Thousand dollars)	176,468	21,985	49,148	15,024	260,625

*Proprietors of unincorporated businesses.

R. W. Secor and *Howard S. Sherman* were elected vice-presidents at the last meeting of the board of directors, Silent Glow Oil Burner Corp., Hartford 5, Conn. "Dick" Secor, sales manager of the Portable Heater Div., joined Silent Glow in 1945, after serving as a U. S. Navy technician assigned to the RAF as a consultant on Pratt & Whitney aircraft engines. Previously he had been sales supervisor for 8 years for Liberty Mutuel Insurance Co., Boston. Howard Sherman, son of President R. M. Sherman, is advertising and sales promotion manager of the company, and, in addition, is engaged currently in liaison work between the company and the armed services. He joined Silent Glow in 1945 also, following termination of service with the Research and Development Branch, U. S. Army Engineers.

L. A. Dixon was elected a director, Rockwell Mfg. Co., Pittsburgh 8, Pa. He has been a vice president of Rockwell's Meter and Valve Div., and previously had been president of the Pittsburgh DuBois Co.

The Bethlehem Crusade-a-therm

for owners of average size homes!

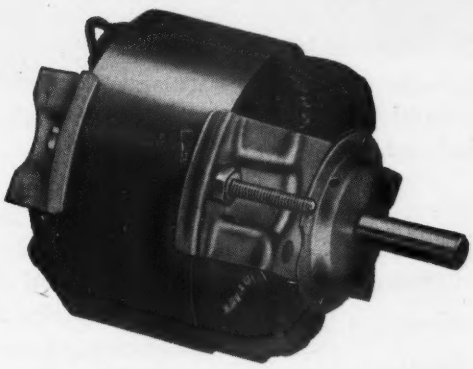
• Here, in a space only 60 inches long, 21 inches wide, and 35 inches high, is a "package" of remarkable heating efficiency. It's a completely automatic, completely reliable source of hot water, too. CRUSADE-A-THERM combines two widely-renowned products, the Bethlehem Boiler and the Crusader Burner, each tops in its field. It's a world-beater for penny-pinching and dependability. And it's the only package unit in the world with the C-liminator, the electrical delay switch that does away with oily smoke upon starting. First choice with thousands of home owners!

MEMBER OHI OIL HEAT INSTITUTE OF AMERICA

BETHLEHEM FOUNDRY & MACHINE COMPANY
BETHLEHEM, PENNSYLVANIA

A few exclusive Bethlehem Crusade-a-therm territory Franchises are still available. Wire or write immediately for full information.

FASCO FRACTIONAL H. P. MOTORS



Cool the 1000-Watt Kodaslide Projector

Kodaslide Projector, Master Model

EASTMAN Kodak's Kodaslide Projector, Master Model, is famous for color shows of unequalled brilliance—at home or in an auditorium.

Fasco's contribution to superb Kodaslide performance is *dependable* power. A carefully specified FASCO motor drives a turbine-type fan to force cooling air to the 1000-watt lamp, to the condenser system, and to both sides of the slide . . . permitting more light on the screen than ever before possible with a 2x2-inch slide projector.

▶Here is another example of efficient, dependable FASCO performance in a top-quality product. From the complete line of FASCO Fractional H.P. shaded pole motors (1/500 to ⅛ h.p.) there may be one that will improve your product by adding economy and dependable performance.

"Your comparison test, too, will prove FASCO best"

Write for complete information

FASCO
INDUSTRIES, INC.
ROCHESTER 2, NEW YORK

for *Small Home* installation...

Scientifically designed for economy and satisfaction

Koven venko *boilers*

OTHER OUTSTANDING FEATURES OF THE KOVEN VENKO PACKAGED UNIT
● Beautifully finished.
● Tested controls especially selected to give quick response to calls for heat and domestic hot water.
● Completely assembled, equipped and wired, ready to connect to system and operate.
● Built for utility rooms with all control and operating parts available at the front of boiler.

With more and more small home projects being built all over the country, you want to feature the boiler that's especially designed and best suited to the needs of smaller homes...and that, of course, means the KOVEN Venko Boiler!

You can assure your customer of greater comfort, convenience and economy when you recommend a KOVEN Venko Boiler.

Not only does the small home owner receive all the rapid, sustained heat needed to keep his whole house comfortable, but lower fuel consumption in this smaller unit means greater savings as well! Recommend KOVEN Venko Boilers to your customers today!

WATERFILM BOILERS, Inc.
A Division of L. O. Koven & Bro., Inc.
154 Ogden Ave., Jersey City 7, N. J.
Plants: Jersey City, N. J. • Dover, N. J.

fuel oil heat

Bulk Stations and Terminals Surveyed by Census Bureau

INFORMATION GATHERED during the 1948 Census of Business on petroleum bulk stations and terminals were released recently by the Bureau of the Census, U. S. Dept. of Commerce. Included in the tabulation are all distributors with physical properties commonly referred to as bulk stations or plants and distributing terminals, selling gasoline, kerosene and fueloils.

Total sales, including taxes, of these establishments totalled $10,616 million in 1948, 2¾ times 1939 sales. There were 29,451 petroleum bulk stations and terminals operating in the United States in 1948. States recording the largest dollar volume included New York, California, Pennsylvania, Illinois, Ohio, Texas and New Jersey, in the order named. Together these states accounted for 41% of the national total.

While the Census release includes a breakdown by individual states, the following tabulation reproduces statistics for the country as a whole.

	Independent Bulk Stations	*Commission Bulk Stations*	*Salary Bulk Stations and Salary-Commission Bulk Stations*	*United States Total*
Establishments (No.) 1948	7,417	16,292	3,937	29,451
1939	6,357	17,530	6,053	30,825
Sales entire year* (Thousand dollars) 1948	1,814,677	2,572,570	3,606,394	10,615,650
1939	627,674	1,080,479	1,739,676	3,807,908
Operating expenses (1948) % of sales	11.4	7.9***	12.1	9.0
Payroll entire yr. (1948) (Thousand dollars)	83,522	50,096	135,663	345,847
Active proprietors**, Nov. 1948 (No.)	6,465	16,111	1,288	23,952
Paid employees, Nov. 15, 1948 (No.)	30,429	21,515	38,702	112,466
Stocks on hand end of 1948 (Thousand dollars)	87,388	19,463	472,922	709,205

*Including sales and turnover taxes.
**Proprietors of unincorporated businesses.
***Operators' commission as a percent of sales.

❖

R. S. Walsh, who had been assistant manager of the Induction Motor Sales Div., General Electric Co., Schenectady, N. Y., for the past year-and-a-half, has been named manager. He succeeds Elliott Harrington, appointed vice-chairman and secretary of a newly-established Defense Projects and Priorities Committee of the company's Small and Medium Motor Divisions.

Les Sheldon, who had maintained sales offices in Merrick, N. Y. for General Filters, Detroit, died suddenly on February 14. Mr. Sheldon had been operating as Eastern Seaboard representative, handling the complete line of General fueloil filters.

VECO TROUBLE FREE Complete Combustion Testing

New-Revolutionary

CO_2 Analyzing Elements

(Sealed in Glass)

SINGLE METER — All readings on one dial Constant accuracy in service use.

3 IN 1 OPERATION

CO_2 INDICATOR
STACK THERMOMETER
DRAFT GAUGE

COMPACT PORTABLE Weighs only 7 pounds

Service Free — Simple to Operate
Economical to Buy
Ideal for testing to F.H.A. requirements

Victory ENGINEERING CORPORATION
"MANUFACTURERS OF THERMALLY SENSITIVE RESISTORS"
744 Broad Street, Newark, New Jersey

Again in '51 you can make more money with the

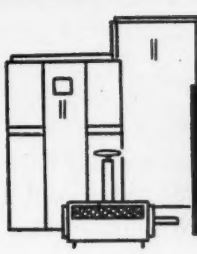
YORK-HEAT LINE

1. PRODUCT LEADERSHIP — Again in 1951 — York-Heat leads the automatic heating industry in product development with the introduction of The Great White Line — the first complete line finished in dazzling white. Every model — 64 in all — is built to York-Heat's high engineering standards — the result of 33 years of specialization in the manufacture of automatic heat.

2. PROGRAM LEADERSHIP — Again in 1951 — York-Heat backs up its products with a complete merchandising program designed to help the York-Heat dealer sell more equipment at a profit. In addition to the Billboard advertising program, which gives national advertising at local levels, the York-Heat program offers a complete advertising and sales promotion program for dealers.

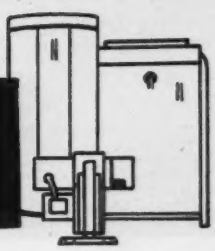
3. PROFIT LEADERSHIP — Again in 1951 — York-Heat and their distributors offer a sales program which allows the dealer to do business at a profit. York-Heat's time-proved distribution policy of selling through distributors who offer definite assistance to dealers forms the keystone of the Profit Program. You can make more money with the York-Heat Line.

Investigate York-Heat's Franchise Today—and see The Great White Line at the Oil Heat Show.



A PRODUCT OF YORK-SHIPLEY, INC., YORK, PA.

YORK yh HEAT



fuelfoil oilheat

OT* SERVICEMAN SAYS —

"If you want answers you have to ask questions...

"Every time I get to the show I like to try to give the Webster Electric engineers a headache by hauling out all the pump problems I've run into . . . and do I learn things! Those fellows really seem to enjoy giving me the answers, and I enjoy getting them. It gives me a chance to be an 'expert' the next time those problems come up. That's why you'll find me hanging around their booth, at the show. Hope I see you there."

*Old Timer

An identical unit is made for sale in Canada by Canadian Acme Screw & Gear, Ltd. of Toronto, under license by Webster Electric Company, Racine, Wis. Established 1909.

WEBSTER ELECTRIC
RACINE • WISCONSIN

"Where Quality is a Responsibility and Fair Dealing an Obligation"

Industry Groups

Activities of local and national industry associations are reported monthly in this department. Secretaries are invited to send reports of their Group's activities to reach the editor by the 18th.

New England Dealers change Date for annual Meeting

ORIGINALLY SCHEDULED to be held on April 26, Fred N. Beckwith, executive secretary, Oil-Heat Institute of New England, Boston, announces a change in date for the group's annual meeting and banquet. It has been rescheduled for May 15 and will take place at the Bradford Hotel in Boston.

Northwest Petroleum Holds annual Meeting

THE 28TH ANNUAL CONVENTION of the Northwest Petroleum Association, Minneapolis, Minn., took place at the Nicollet Hotel, January 25 and 26. Capacity crowds attended the meetings and business sessions, participating in panel discussions and hearing speakers discourse on timely subjects.

Charles H. Arnold, Haggart's Service, Fargo, N. D., was elected president and Myles Hall, Como Oil Co., Duluth, became vice-president. N. R. Distel, Distel Oil Co., LeSeur, was re-elected treasurer. Directors elected were: John Decker, Becwar-Cedarstrom, Minot, N. D.; Mr. Hall; Harm Smook, Good Service Oil Co., Luverne; Gil Gustason, Gustason-Bruner Oil Co., So. St. Paul; Irv Talle, Community Co-op Oil Co., Albert Lea; Kernel Helgerud, Helgerud Oil Co., Harvey, N. D., and Oscar Hilmen, Hilmen Oil Co., Berwick, N. D. H. F. Horning continues as secretary.

A total of 22 companies had equipment exhibits. Prizes were awarded to registrants, selected from those who turned in a card which indicated a visit to each of the displays. A general session on January 25 was designated an "open forum," preceded by the election of officers and committee reports. Principal speaker was Otis H. Ellis, general counsel, National Oil Jobbers Council, Washington, D. C.

A similar session on January 26 featured a discussion on gas taxes and roads, a 9-man panel on bulk plant operations and a talk, "Fun in the oil business," by Jack Cummins, Cumberland Oil Co., Nashville, Tenn.

Missouri Jobbers hold Annual Convention, Exhibit

THE ANNUAL CONVENTION and Trade Exhibit of the Missouri Petroleum Association, Jefferson City, Mo., took place in February 5, 6 and 7 at the Hotel President, Kansas City, Mo. Prizes were awarded for visiting each of the equipment displays manned by manufacturers and local distributors. Registrants were provided with a card that had to be punched at each display to be eligible to participate in the drawing for awards.

A luncheon on February 5 opened the business sessions, at which talks were delivered by Otis H. Ellis, National Oil Jobbers Council Washington Counsel and Robert Gray, editor, FUELOIL & OIL HEAT. An afternoon session that followed was devoted to a panel discussion of ICC safety regulations for petroleum transporters.

The program on February 6 included a late-morning business session and a luncheon at which Walter King, Wage & Hour & Public Contracts Division, U. S. Dept. of Labor, spoke. Clarence Niesen of Mid-Continent Petroleum Corp., also talked about "Salesmanship—and How," followed by an address by Harry Kennedy, Continental Oil Co. The annual banquet and dance was held during the evening, with a final business session on February 7 rounding out the program.

All officers were re-elected, including H. E. Milton, president; Del C. Blunk, vice-president, Roy W. Blair, treasurer and Earl Baumgardner, secretary. W. P. Stevenson, Joe E. Huber, Melvin Hall and John Rupp, were renamed directors for three year terms; W. H. Ayers, Mr. Milton and Ed Clear for one-year.

Maryland Group told of Junior Heat Engineering Course

THE PROGRAM for the monthly meeting of the Oil Heat Association of Maryland, Inc., Baltimore 1, Md.,

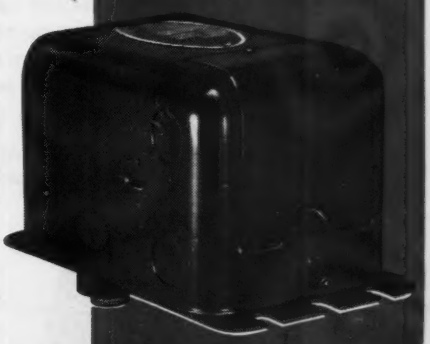
OT* SERVICEMAN SAYS—

"Here's where I'll get many good suggestions . . .

"That's what I look forward to . . . the more I learn about products, the easier my job as service man gets. For instance, by talking with Webster Electric engineers, other years, I learned some of the reasons why their products save me needless call-backs and complaints. That knowledge has been putting money in my pocket and customers on my books for a good many years. It will do as much for you, if you'll specify Webster Electric products on the burners you install, and use them on all replacement jobs."

*Old Timer

Webster Electric transformers are made by Webster Electric Company, Racine, Wisconsin. Established 1909.



WEBSTER ELECTRIC
RACINE • WISCONSIN

"Where Quality is a Responsibility and Fair Dealing an Obligation"

featured a talk by Dr. Chester H. Katenkamp, dean of the Baltimore Junior College. He explained the advantages and importance of a new two-year course in Junior Heat Engineering that has been added to the College curriculum.

The course, designed to prepare students as consultants, designers and estimators in the heating industry, awards on completion a degree of Associate in Arts and equips students for technical and executive positions. It was developed as a result of discussions between College officials and members of the Association.

Editors inspect Warm Air Group's mobile Laboratory

A GROUP OF real estate and building editors of magazines and newspapers inspected the mobile laboratory of the National Warm Air Heating and Air Conditioning Association, Cleveland, Ohio on January 22 during an actual check of a system installed in Chicago's Park Ridge section. The truck-contained laboratory, in charge of James W. Brill, of the Association's research staff, checked the warm air heating system installed in the home of Kimball Hill. The system, designed by Mechanical Home Systems, Chicago, and installed by H. A. Ziehm Co., Chicago, is unique in that warmed air is admitted into the room from floor registers located under windows.

The editors examined the more than 400 lbs. of electronic heat testing apparatus with which the truck is equipped, and were shown how it is possible with it to record a continuous picture of the temperature pattern throughout an entire house and observe how it relates to changes in outside temperatures. The mobile Home Heating Test Laboratory will be used to test heating systems in homes throughout the nation, with an anticipated equivalent of ten years of formal research achieved in two years.

Human Relations discussed At Washington, D. C. Meeting

THE REGULAR MONTHLY MEETING of the Oil-Heat Institute of Greater Washington, Washington 5, D. C., was held on February 20 at the Du Pont Plaza Hotel. The luncheon gathering featured a talk by Harry G. Easmann, assistant director of the personnel department, Potomac Electric Power Co., on the subject "Good Human Relations in industry pay off." He recounted experiences and experiments that have proven successful and suggested how dealers could apply the plans to their own programs.

To stimulate attendance, especially among top management personnel, members of the Institute's board of directors personally contacted the entire membership list, urging attendance at this meeting and at subsequent regular meetings held on the third Tuesday of each month.

Annual Meeting held by North Carolina Jobbers

JANUARY 17 was the date of the annual meeting held by the North Carolina Oil Jobbers Association, Raleigh, N. C. Re-elected as officers for 1951 were: Roby E. Taylor, president; Sterling D. Wooten, 1st vice-president; Forest C. Roberts, 2nd vice-

Let's make it a "*date*"... April 2nd in Chicago

...to meet the newest model in the Johnson Burner family!

An important new oil-fired furnace in the Johnson Burner line-up will be on display at our booth in Chicago. It's the Johnson AEROLUX Model 65-U, designed for forced warm air heating of homes and buildings having a heat loss of 50,000 to 65,000 BTU per hour.

We believe you will find the AEROLUX 65-U well worth study and investigation. Many Heating Engineers have given a high rating to its efficiency and its exceptionally low operating cost.

It is quite possible that you will find it to be exactly what you need to solve certain difficult installation problems as it is exceptionally compact (only 25" square on the floor and 52" high) and can be easily installed in any small space—even a closet on the main floor. We will be very happy to show it to you . . . and to welcome old friends and new at the Johnson exhibit in Booths 101-2-3.

Johnson Oil Burners

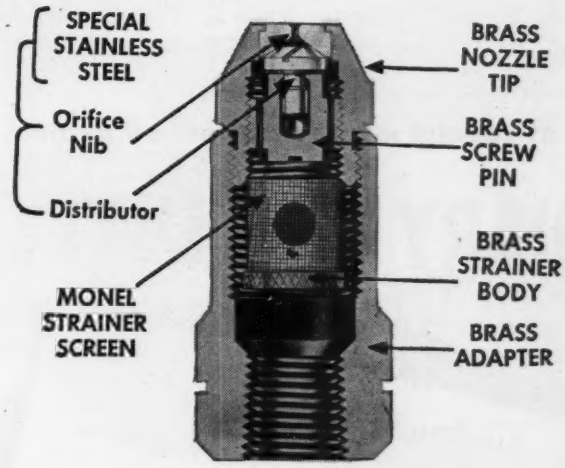
SINCE 1903

S. T. JOHNSON COMPANY

940 Arlington Avenue, Oakland 8, Calif.
401 No. Broad Street, Philadelphia 8, Pa.

DELAVAN NOZZLES
give Better Oil Burner Performance

SOFT, QUIET FIRES
TROUBLE-FREE SERVICE
MAXIMUM OIL ECONOMY



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HALLY FILTERS

Stop Nozzle Clogging

The HALLY FILTER, made and sold EXCLUSIVELY BY DELAVAN, keeps out ALL foreign matter likely to clog nozzles, because its openings are only one-half to one-fourth as large as those in filters it replaces. Order HALLY FILTERS attached to DELAVAN nozzles. HALLY FILTERS available for all makes of small capacity nozzles —10 of one size per box.

★

ORDER THE

DELAVAN SERVICEMAN'S KIT

A sturdy steel case with compartments for nozzle tips, adapters, strainers; Also includes 1/4" MPT test gauge, 0 to 300 PSI; gauge adapter 1/8" FPT to 1/4" MPT; Delavan Nozzle Tool; nozzle parts brush; open end wrench 5/8" and 3/4". A real bargain at only $11.

DELAVAN SLUDGE SOLVENT

. . . keeps fuel clean, nozzles and lines free of sludge. This remarkable solvent also eliminates water, prevents soot formation and assures smoother burner operation.

See This Winning Combination at the

OHI SHOW . . . BOOTH NOS. 157 and 158

DELAVAN MANUFACTURING CO.

WRITE FOR CATALOGUE 147D

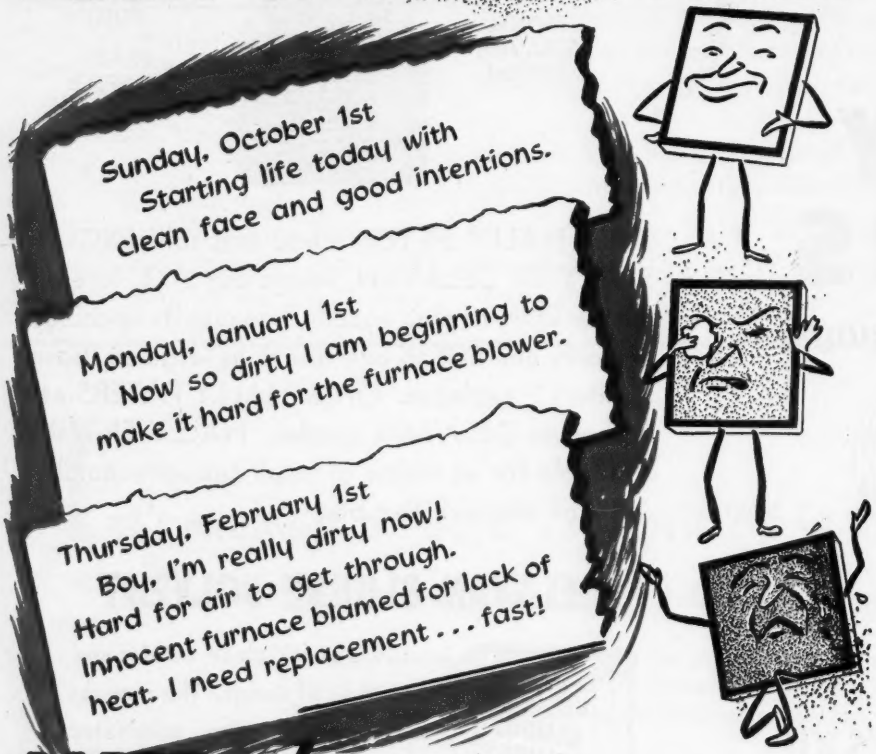
3009 SIXTH AVE• DES MOINES 13, IOWA

president; S. D. Bryan, treasurer and W. A. Parker, executive secretary. A change in the by-laws, adopted at the meeting, provides for 7 directors to be elected each year for a two year term. The outgoing president automatically becomes a director and the entire board then elects 3 others for a one year term. Named for two years were: Richard B. Boren, Jr.; T. Ed Brown; Orrie F. Dumas; J. Parks Gwaltney; D. Worth Joyner; Frank Henan; Forest C. Roberts. James K. Glenn, Ed P. Goodwin and Paul P. Harris were elected for a one-year term. Membership dues were fixed for jobbers and associate memberships.

J. Parks Gwaltney, chairman of the Legislative Steering Committee, told the group how his committee is trying to interest everyone in prompt and definite action when required. Substituting as a speaker for Otis H. Ellis, Washington representative and counsel for the National Oil Jobbers Council, who was prevented by illness from appearing, was Waldo C. Cheek, State Insurance Commissioner. His talk explained how insurance rates are fixed and how the insured dealers themselves are responsible largely for fixing their own rates. He concluded by outlining steps the jobbers and dealers can take to improve safety and influence rate reductions.

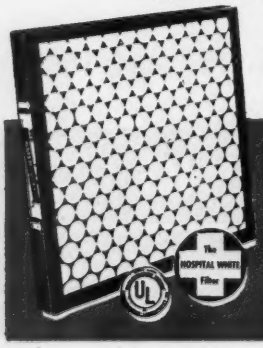
. . . of special interest to fuel oil dealers

DIARY of a DIRTY FILTER


Sunday, October 1st
Starting life today with clean face and good intentions.
Monday, January 1st
Now so dirty I am beginning to make it hard for the furnace blower.
Thursday, February 1st
Boy, I'm really dirty now! Hard for air to get through. Innocent furnace blamed for lack of heat. I need replacement . . . fast!

AMER-*glas* to the rescue!

Urge your customers to replace dirty filters regularly with new AMER-*glas* Filters. Inexpensive. Clean to handle, no prickly slivers. AMER-*glas* is *the* filter for satisfied customers . . . a new source of regular profit to you.



AAF

Send today for proof of AMER-glas profits.

An *Engineered* product of

American Air Filter

COMPANY, INC.

134 Central Avenue • Louisville 8, Kentucky

Massachusetts enforcing Tank Truck Regulations

OIL-HEAT INSTITUTE OF NEW ENGLAND, Boston, has advised its members that the state of Massachusetts is enforcing requirements governing the inspection of motor vehicles transporting inflammable fluids over the highways of the Commonwealth. The Board of Fire Prevention Regulations issued Form FPR-7 on May 5, 1949, which covers fueloil tank trucks. Until recently, the Institute points out, active enforcement has not been pursued and some dealers have failed to comply with the requirements. Fire Marshal inspectors can order a truck off the road for non-compliance and can hail the drive or company to court.

Briefly, the regulations provide that no tank truck shall be used for transportation of fluids, including fueloil, unless it has been approved and carries a certificate of approval. In addition, tanks shall be metallically connected to the chassis or running gear and no chain shall be permitted to drag upon the ground. Each tank truck, under the regulations, must have at least one hand fire extinguisher and must bear the owner's name and be numbered in the case of an owner operating more than one truck.

Nassau fueloil Dealers Affiliate with NYOHA

THE FUELOIL AND OIL HEATING DEALERS of Nassau, Inc., has affiliated with the New York Oil Heating Association, Long Island City 1, N. Y., and will be known as a division of NYOHA.

In announcing the merger, William Allyn, president of the Nassau group, stated it was felt that by becoming part of the New York Oil Heating Association, the problems of the dealers could be watched better and taken care of more efficiently. He urged all

VARIOUS MODELS
.5 to 15 gph

HomEase is the Burner You Can Easily Sell!

IT HAS REAL EXCLUSIVES . . .

1. FLAME-IZER

The HomEase Flame Shape Control that insures a high CO_2 by fitting the flame to the individual firebox.

2. FIRE-STAT

The HomEase Control that meters an extra amount of air to the flame on cold starts to prevent sooting and smoking.

☆ HomEase Oil Burners let dealers *keep* their profits. Minimum of attention and less service calls make for satisfied customers. HomEase does have an important place in your line. Get the *facts* and you will see why so many HomEase Burners have required so few troublesome service calls. HomEase Products Company, Paterson 3, New Jersey.

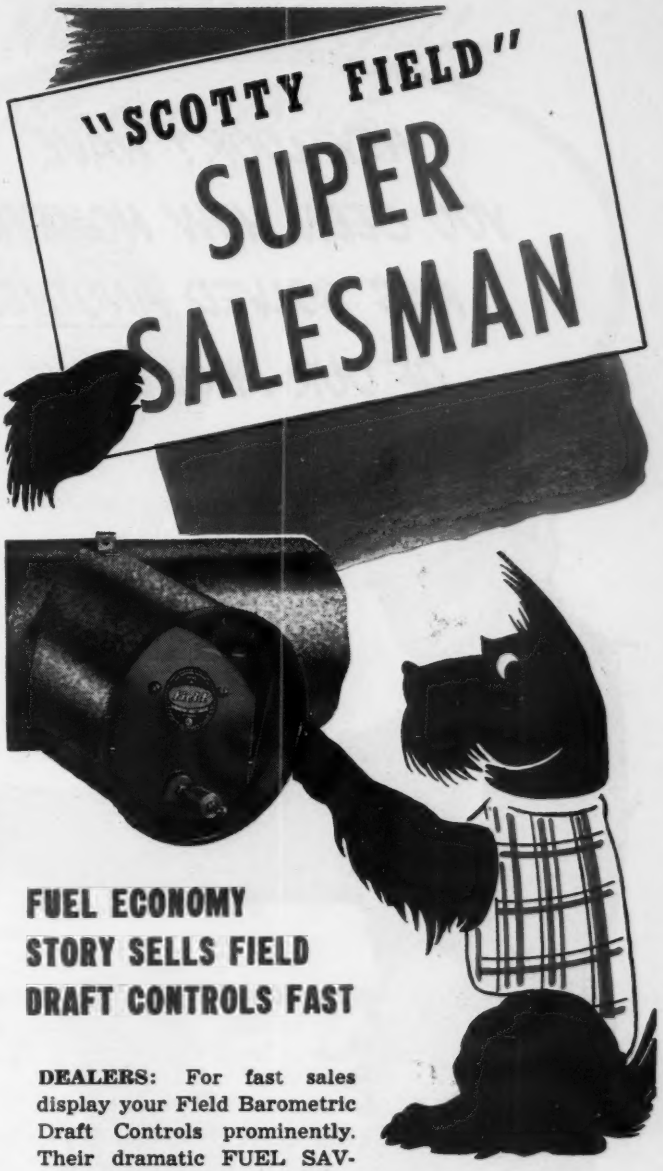
LITERATURE & INDIVIDUALLY PRINTED SALES AND SELLING HELPS

Write Now for the Story!

HOMEASE
THE KEY TO BETTER LIVING

THE OIL BURNER THAT'S BOUGHT FOR ITS TWO EXCLUSIVE VALUABLE FUEL AND MONEY-SAVINGS FEATURES

"SCOTTY FIELD"
SUPER SALESMAN



FUEL ECONOMY STORY SELLS FIELD DRAFT CONTROLS FAST

DEALERS: For fast sales display your Field Barometric Draft Controls prominently. Their dramatic FUEL SAVING story makes them best-sellers, self-sellers!

A Field Barometric Draft Control improves the performance of any heating plant—provides for lower fuel consumption, increased safety, longer plant life. That's why dealers find it profitable and easy to sell the efficient, durable Field Barometric Draft Control. Write today for complete information on the Field Barometric Draft Control line.

On The Finest Heating Equipment Field Controls The Draft.

FIELD BAROMETRIC DRAFT CONTROLS

FIELD CONTROL DIVISION
H. D. CONNET & COMPANY MENDOTA, ILLINOIS

AFFILIATES: COMCO MATERIALS HANDLING DIVISION CRANES, HOISTS

Field REGISTERED

AFFILIATES: PRODUCTS, INC. BRICK TILE STONE

BAROMETRIC DRAFT CONTROLS
Visit Our Booth #130, National Oil Heat Exposition, Navy Pier, Chicago, April 2-8.

HEY, LOOK! HAVE YOU SEEN HOW HONEYWELL HAS SOLVED ANOTHER OF OUR PROBLEMS ?
SURE! AND THIS NEW VALVE IS GREAT - I'VE BEEN TESTING IT. LISTEN TO THE LETTER I JUST WROTE HONEYWELL!
"We want to compliment you and your firm on the new V4001 delayed Solenoid valve because it is the answer to my dreams. If I had made it up myself, I could not have incorporated any more features in it than you have done! It's a honey! We are enclosing an order for 200 of these and we want you to send us 25, 50 or 100 or the whole order as soon as you can!"*

**From one of many enthusiastic letters Honeywell has received from manufacturers of oil heating equipment. We'll be glad to show you the complete file.*

dealers to join the new devision.

Philip H. Schepp, executive secretary of NYOHA, will function in a similar capacity for the new division.

Pacific Coast Conference Held at Portland, Oregon

OREGON HEATING INDUSTRIES, Portland 4, Oregon, were hosts for the Pacific Coast Oil Heat Institute Conference, held at the Multnomah Hotel, Portland on March 3. The intensive program arranged for the day included four panels in the morning, a noon luncheon and evening banquet. The opening panel on "Credit" was conducted by Walt Dennis, followed by one on "Dispatch and Degree Day," with Jim Yeomans as chairman and a third on "Trucks and Equipment" by Ben Wilkins. John Banks was chairman of the concluding panel on "Oilburners."

Other speakers at the meeting were Ralph Becker, managing director, Oil-Heat Institute of America; L. Mittleman, chief chemist, Tidewater Associated Oil Co., San Francisco; Russell Westover, Jr., president, Ray Oil Burner Co. and L. A. Casler, executive vice-president, Eureka Williams Corp. David B. Simpson, Portland's 1950 "First Citizen," and vice-president, Norris, Beggs and Simpson, appeared as after-dinner speaker.

Licensed Burner Installers Elect slate of Officers

THE ANNUAL DINNER for induction of new officers was held by the Licensed Oil Burner Installers of Queens, Inc., Brooklyn 1, N. Y., at the Diplomat Restaurant, Jamaica, N. Y., on January 24.

Irving Wald, counsel for the group of dealers licensed to install oilburners in New York City, presided at the ceremonies. Newly-elected officers are: Roland LeRoy, president; James Brandi and Joseph Green, vice-presidents; Sylvain Segal, treasurer; John Rossi, financial secretary; John Strott, recording secretary and Gus Peterson, sergeant-at-arms. Members of the board of directors inducted were: Joseph Lauda, Willie Hoenninger, Saul Weithorn, Roy DeMott, Edward Kink, John Hartman, John T. McMahon and Robert Dretchen.

ANNOUNCING THE NEW HONEYWELL DELAYED-OPENING OIL VALVE

CUTS OUT MANY OF YOUR NO-PROFIT SERVICE CALLS

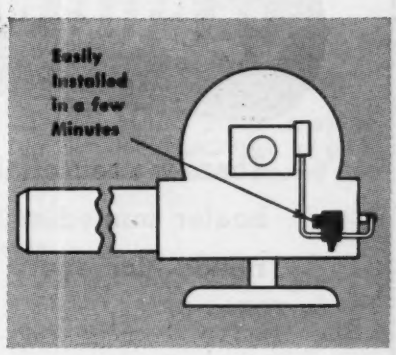
BECAUSE IT GIVES A CLEAN START, A CLEAN STOP EVERY TIME!

Here's great news — a valve that eliminates "lazy" and smoky starts and stops — prevents excessive carbon coating on burner nozzle and electrodes — reduces carbon accumulation within heat exchanger — reduces possibility of start-stop oil odors.

Here's how it works: When the room thermostat starts the burner, this valve delivers oil *only* after the burner motor and the ignition have been operating for several seconds. This delayed-opening feature provides the normal operating fuel-air ratio at the time combustion occurs.

And it allows the electrodes to clean themselves before the fuel is supplied to the oil burner. Moreover, this remarkable new valve closes instantly for a clean cut-off when the circuit to the burner motor is broken.

How much money will it save YOU — by reducing no-profit service calls? *Plenty*, we're sure you'll agree. And it's bound to *make* you plenty of money, too — because it will be mighty easy to sell for replacement. So why not get all the facts about this new Honeywell valve right away? Just fill out and mail coupon below — *today!*



MINNEAPOLIS **Honeywell**

First in Controls

MINNEAPOLIS-HONEYWELL REGULATOR CO.
Minneapolis 8, Minnesota, Dept. FH-3-03
Gentlemen:
Please send me complete selling, installation and service information about your new Delayed-Opening Oil Valve (V4001). I understand this places me under no obligation.

Name_____

Firm Name _____

Address_____

City_____ Zone_____ State_____

Wisconsin Dealers map Year's Plans at Meeting

THE MARCH 1 meeting of the Wisconsin Oil-Heat Association, Inc., Milwaukee 2, Wis., held at the Wisconsin Hotel, was an important one during which major plans for 1951 were discussed. Proposed advertising plans and a proposed membership expansion program for the year were introduced for consideration.

The plans for the 1951 Home Show also were explained, with members asked to send in cards accepting assignment during certain hours of the days the Show will be open at the booth the Association will sponsor. Reports on the annual industry rally and from the legislative committee rounded out the program.

Massachusetts Dealers hear Of the Outlook for Oil

A DINNER MEETING, held by the Massachusetts Oil Heating Association, Inc., Boston, Mass. on February 20 at the Hampton Court Hotel, Brookline, was the group's 176th regular meeting. Featured speaker was Thomas Walsh, head of the industrial division for New England of The Texas Co.

He drew on experience gained during his association with the fueloil industry since 1923 to talk about "The Outlook for Oil in 1951," paying particular attention to the probable effect on market conditions of impending material shortages due to Government regulations and the defense program.

St. Louis Oil Men's Club Elects, plans Activities

WILLIAM G. RAITH, JR., was named president for 1951 by the Oil Men's Club of Greater Saint Louis, Mo., with C. E. Muellerleile and A. Jack Becker elected vice-presidents; L. S. Pfaff, secretary-treasurer. K. C. Baker, past president, became a honorary director and Harry Milton, Harlow O. Panhorst, Roy C. Mueller, Rudolph F. Bretsnyder, Frank A. Shaddy, Robert W. May and Paul V. Browne were named directors.

The Club, now in its third year, is planning an active year. Semi-monthly luncheons are planned throughout 1951. Social activities in prospect include a Spring stag outing, attendance at a National League baseball game in July and a civic leaders' luncheon and dinner dance in connection with Oil Progress Week in October.

Indiana warm air Group Elects at annual Meeting

THE 33D ANNUAL CONVENTION of the Sheet Metal and Warm Air Heating Contractors' Association of Indiana, Terre Haute, Ind., was held on February 1 and 2 at the Hotel Severin, Indianapolis.

Included during the 2-day session was the report of the nominating committee, which was approved by the membership and resulted in the election of the following officers: President, L. D. O'Donnell; 1st vice-president, H. Merle Daily; 2d vice-president, A. Schnakenburg; treasurer, Homer Selch; secretary, Frank Anderson; directors, William E. Garber, Jr. and T. B. Speaker. Six other directors were held over for another year.

Winning New Friends Every Day!

*VACUUMATIC

The "world's fastest water heater"

There is a reasonably priced Alstrom water heater immediately available to fill your needs—for every type and size of boiler.

*Reg. T. M.

Write today for free booklet "The Vacuumatic Story"

THE ALSTROM CORPORATION

P. O. Box 33, Dept. F3 ● New York 60, N. Y.

Manufacturers of:

HEAVY DUTY SUBMERGED COILS • OIL PREHEATERS
COUNTER-FLOW TANKLESS GENERATORS

Here's how I give my customers *Low Cost Hot-Water Heat-*

BURNHAM BASE-RAY
RADIANT BASEBOARD

Bill Brown is only one of a fast-growing army of heating contractors that has learned the secret of this combination. It's getting these contractors business against competition they never expected to beat.

BASE-RAY* has been proved and tested by thousands of installations during the last five years. Its performance delights everyone. *Now* you have the series loop installation system, tested and approved by IBR (See Installation Guide No. 5). Experience has shown that this method can save up to 50% in fittings, pipe and labor. *Right there* is where you catch up with competition!

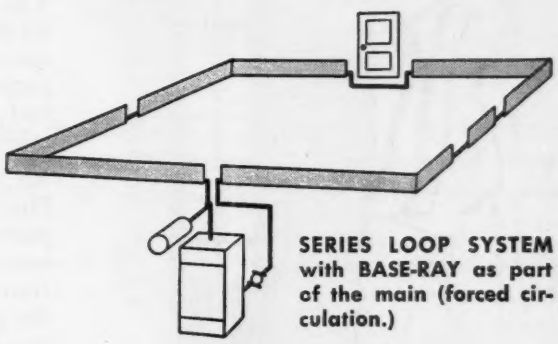
It's so simple. And it's ideal, too, for the modern ranch-type house and particularly suited to basementless construction.

Why not follow Bill Brown's lead to more jobs and better satisfied customers. Do a little figuring! Test the BASE-RAY —Series Loop Combination. It's a real business winner!

*Reg. U.S. Pat. Off.

And to assure your customers of abundant, low-cost, year round domestic hot water, there's nothing like a Burnham PACEMAKER or YELLO-JACKET Boiler. Each has built-in copper water heater—tankless or storage type.

Plus THIS SIMPLE SERIES HOOKUP



SERIES LOOP SYSTEM with BASE-RAY as part of the main (forced circulation.)

SAVES PIPE
SAVES FITTINGS
SAVES LABOR
A SURE-FIRE BUSINESS GETTER

Don't miss our exhibit at the 19th National Oil Heat Exposition, Chicago, April 2-6th. Booth No. 357

Burnham Corporation

"PIONEERS OF RADIANT BASEBOARD HEATING"

IRVINGTON, N.Y., Dept. FO-31

BURNHAM CORPORATION
Irvington, New York Dept. FO-31

Please send me new copy of "Ratings and Installation Guide" on BASE-RAY Radiant Baseboards.

Name_____

Address_____

City_____ State_____

Houston Meeting is First of Year for OIIC

THE FIRST OF ITS 1951 series of meetings was held by the Oil Industry Information Committee, New York 20, N. Y., at Houston, Texas, February 5 to 7. Operating plans for the year were discussed and formulated. Other meetings will be held in Denver in May, New York in September and Chicago in November.

The Houston meeting saw the induction of John L. Dupree, Socony-Vacuum Oil Co., as 1951 chairman. He was elected last November to succeed George Freyermuth, Standard Oil Co. (N. J.).

I-B-R co-sponsors a Steam, Hot Water engineering Course

A THREE-DAY Engineering Institute held at Madison, Wis. on February 13, 14 and 15, was jointly sponsored by the Institute of Boiler and Radiator Manufacturers, New York, N. Y. and the University of Wisconsin. Designed for all members of the industry, newcomers learned sound basic principles and experienced men benefited from instruction in cost reducing designs. Each student who attended all classes and satisfactorily completed the course receive a certificate.

The Institute included morning, afternoon and evening classes with instructors covering specific phases of both hot water and steam heating systems. The general subject of heat loss calculations, was followed by sessions that discussed the design of one-pipe forced circulation hot water and one-pipe steam systems, along with explanations of controls and piping for both types. Other lectures dealt with baseboard radiation, its design and layout, panel heating and a modernization clinic. I-B-R Guides were used as the basis of instruction for the specific types of systems they cover.

ASHVE honors Hutchinson By Presentation of Plaque

A BRONZE PLAQUE "in recognition of 25 years of loyal service" has been given to A. W. Hutchinson, executive secretary of The American Society of Heating and Ventilating Engineers, New York 10, N. Y. Presentation was made by Lauren E. Seeley, Society president, who paid tribute to Mr. Hutchinson as the "one man in the ASHVE responsible for keeping the wheels in motion and the bearings oiled."

Mr. Hutchinson was born in Brooklyn, N. Y., and has been secretary of the Society since 1926, after having been editor of several engineering trade papers.

Name Officers for Unit Heater Association

THE ANNUAL MEETING of the Industrial Unit Heater Association, Detroit 26, Mich., was held in Philadelphia January 22 and 23. Included on the agenda was the election of officers for the coming year. Re-elected were J. C. Patterson, president; H. S. Wheller, vice-president and L. O. Monroe, secretary-treasurer.

Mr. Patterson is director of sales, industrial heating, Carrier Corp.; Mr. Wheller is president, L. J. Wing Mfg. Co.

NEW ELECTRIGLAS RADIANT HEAT

. . . your answer to profitable supplemental heating!

ELECTRIGLAS Radiant Heat panels offer you a profitable and trouble-free solution to your problem of "difficult-to-heat" rooms. You can install ELECTRIGLAS panels in bathrooms and other rooms where compactness, modern appearance, and individual room temperature control are essential.

An ELECTRIGLAS Radiant Heat unit consists of a tempered glass electrical-resistance panel enclosed in a steel frame. The back surface of the glass contains a chemical heating element permanently fused into it. The panels are available with built-in Robertshaw thermostat for automatic room temperature control.

You can install ELECTRIGLAS panels flush with a wall surface, and they require a recessed depth of only 1½". They are also available as baseboard units. You can use ELECTRIGLAS panels to supplement a central heating system, or to provide off-season heat in individual rooms.

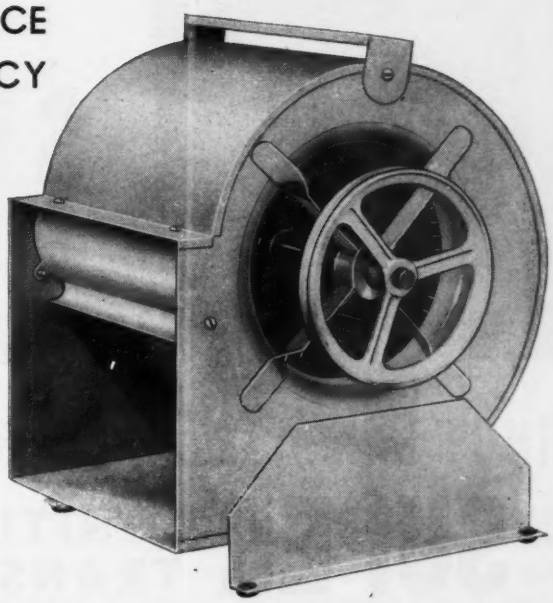
DEALERS! DISTRIBUTORS! Learn how ELECTRIGLAS can add new profits to your oilheating business — write for full details on your letterhead NOW!

APPLEMAN GLASS WORKS
New Bridge and Windsor Road
BERGENFIELD NEW JERSEY

. . . and Now **Brundage**

SERIES "X" BLOWER ASSEMBLIES

UNEQUALED IN PERFORMANCE
UNMATCHED IN EFFICIENCY



ECONOMY

BABY "B"

Features . . .

BLOWER WHEEL: Duo-multiblade wheel, statically and dynamically balanced. Staggered, half blades hot riveted to center disc and outer rims.

SCROLL: Heavy gauge, cold rolled steel housing engineered and designed for maximum efficiency of blower wheel.

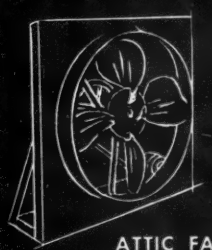
BEARINGS: Self-aligning, readily accessible, spherical units with increased oil reservoir cushioned in shock-resistant Neoprene sleeve.

BEARING SUPPORT BRACKET: Four-point suspension. Arms securely attached to side-plates by special welding process. Same bracket applicable to any style of discharge.

MOTOR MOUNT: One-piece, reinforced, bridge-type applicable to any style of discharge or motor location.

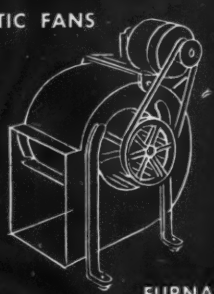
Year after year Brundage has demonstrated an unusual ability to offer furnace manufacturers EXACTLY what they require in blower performance and construction. Now, with the new Series "X," Brundage points the way to even greater efficiency in air handling.

Investigate the broad range of sizes and styles. Write today for complete engineering data.

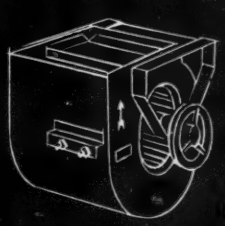


ATTIC FANS

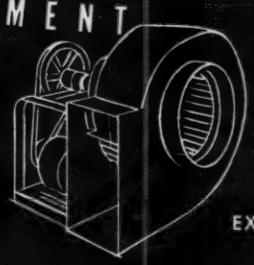
AIR HANDLING EQUIPMENT



FURNACE BLOWERS



SPECIAL BLOWERS



EXHAUSTERS

Brundage COMPANY

Blower Specialists Since 1919

515 NORTH PARK STREET
KALAMAZOO 11, MICHIGAN

University of Wisconsin holds Warm air Heating Institute

A WARM AIR HEATING INSTITUTE was held at Madison, Wis., March 13 to 15, under the joint sponsorship of the University Extension Division and the College of Engineering, University of Wisconsin and the National Warm Air Heating and Air Conditioning Association, Cleveland, Ohio. The Institute was planned for manufacturers, installation and service personnel who work with warm air heating equipment.

Some of the speakers were L. G. Miller, Dean of the College of Engineering, Michigan State College; Prof. R. C. Tegtmeyer and Prof. D. W. Nelson, both of the University of Wisconsin and L. V. Teesdale of the Forest Products Laboratory, Madison, Wis. Also, representing manufacturers were: C. W. Nessell, Minneapolis-Honeywell Regulator Co.; Otto J. Ress, L. J. Mueller Furnace Co. and I. W. Parri, Perfex Corp.

F. J. Van Poppelen, formerly manager of Manufacturing, has been named assistant general manager, Air Conditioning Dept., General Electric Co., Bloomfield, N. J. *E. D. Kemble* has succeeded Mr. Van Poppelen as manager of manufacturing and *Ralph G. Swigart* has succeeded Mr. Kemble as plant manager of the automatic heating equipment plant. Mr. Van Poppelen joined General Electric in 1949 at Schenectady, working in the office of the vice president in charge of manufacturing policy and came to Bloomfield in 1949 as manager of manufacturing. Mr. Kemble before his recent appointment managed the Company's automatic heating equipment plant at Bloomfield. Mr. Swigart has been working on special assignment in connection with production control for all plants of the Department.

Van Poppelen

Kemble

Swigart

M. A. Straub has been appointed sales manager, Norge Heat Div., Borg-Warner Corp., Detroit, Mich. Mr. Straub has been associated with Norge Heat Division for more than 4 years. He formerly was assistant sales manager and was serving as advertising manager at the time of his promotion. Before joining Norge Heat he served as an officer in the U. S. Navy.

ADD

SUPER

VALUE TO

your oilburners

WITH

SUPER IGNITION TRANSFORMERS

★ 2 YR. GUARANTEE

★ PATENTED RADIO SHIELDING

★ MOISTURE-PROOFED IGNITION

Quality design and construction, field-proven performance and dependability, and top value plus lower cost combine to earn ever-increasing approval, acceptance, demand for SUPER Ignition Transformers.

As a single source of coordinated supply, SUPER is also at your service with:

- Transformers built to custom as well as standard specifications.
- An all-inclusive range of mounting bases.
- Replacement transformers for every service application.

Mf'd In Strict Accordance With UL Requirements
Also CSA Approved

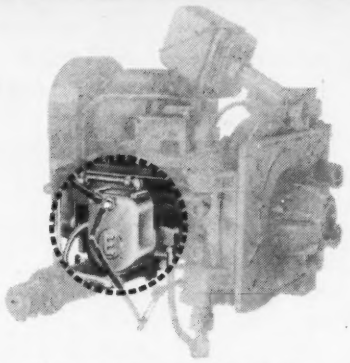
Super
ELECTRIC PRODUCTS CORP.

See us at
Booth 437
O.H.I. Show

46 OLIVER STREET
NEWARK, NEW JERSEY

.....in the Spotlight

for Lower Fuel Costs, Higher Burner Efficiency

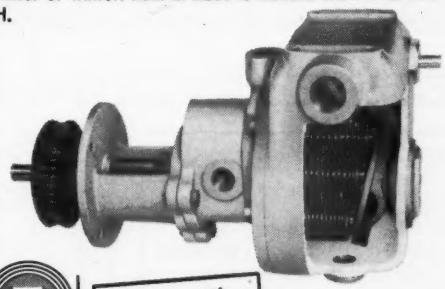


Easily Installed on Enterprise Burners

The P-D Metering Pump is designed for use only on Enterprise pump-type oil and gas-oil burners, to provide a constant, accurate fuel supply.

Dual Pump Construction

Consisting of a primary and secondary pump and reservoir, with by-pass for air, the P-D Pump provides exact metering of oil—light or heavy, hot or cold, clean or dirty, in summer or winter. Built in sizes to handle from 0 to 100 G.P.H.



ENTERPRISE P·D* METERING PUMP

First developed and perfected for oil burner operation by Enterprise, the positive displacement type metering pump provides *exact* delivery of the *proper* quantity of oil at a *constant* rate—regardless of changes in temperature and viscosity. More than six years experience in practical application has brought refinements in design and construction that make this the most efficient and accurate metering device of its type. Servicing requirements are kept to a minimum: there are no ports to clog, no adjustments to make, no relief valves, compensating valves or pressure gauges. Operating in a completely sealed oil bath, the P-D Metering Pump remains virtually free of wear through years of continuous operation. The precision oil delivery provided by this versatile pump assures a constant burner firing rate; cleaner, more efficient combustion, with a resultant savings in fuel consumption. Full information is contained in Bulletin No. 51, available on request.

ENTERPRISE ENGINE & MACHINERY CO.
A Subsidiary of General Metals Corporation
18th & Florida Sts., San Francisco 10, California

*{ Positive Displacement / Precision Delivery of Oil

19th NATIONAL OIL HEAT EXPOSITION
April 2-6 1951
NAVY PIER CHICAGO
And 28th Annual Convention Sponsored by OIL HEAT INSTITUTE OF AMERICA

Plan to visit BOOTH No. 137 at the National Oil Heat Exposition for a look at modern Enterprise Oil Burners and equipment.

Enterprise Oil Burners

Biggest Btu Boner

AFTER HE HAD told his troubles to the owner of the supply house he bought from, this service man kept the appointment that the supply house owner made with a heating engineer.

"I got called in on this job because the circulator froze a gland bearing," the service man started telling the heating engineer. "The owner said the contractor who'd put in the one-pipe forced heating plant six months earlier had given up in despair without getting paid fully. My big mistake was getting interested in the heating after I fixed the circulator."

He found one circulator and three motorized valves for the zones, he went on. Circulation seemed poor, as on cold days only the radiators close to the boiler got real hot, and only with globe valves 1, 2, and 3 half closed. He told the owner the job was weird anyhow, unlike anything he'd ever seen, and said he'd fix it up by installing three circulators to give positive circulation for each of the three zones. The drawings show how he eliminated the three motorized valves.

One reason he felt sure he was right was that originally the circulator was supposed to run continuously all winter, being turned on when the winter started and stopped after that only by a reverse-acting control when the boiler chilled below 160°. A power plant engineer told him the circulator would churn and overheat running steady with the three zone valves closed.

Right now, using the three circulators, the circulation seemed better, but on cold days the radiators were too cold. Checking closely, the service man found that with two circulators idle, any one circulator heated its radiators beautifully. But with any two circulators running, the boiler remained at 170° and the burner ran continuously.

"What about the radiation load?" asked the heating engineer.

"It's all concealed radiation," answered the service man. He had not measured the load, it turned out, for he had concentrated on circulation troubles. He knew the boiler was good for 2.0 gph, was fired at this rate, and gave 715° stack and 9¼% CO_2.

Next day he returned to the heating engineer reporting the zones included 380, 462, and 290 sq. ft. of radiation.

"Total net radiation load is 226,400 Btu," said the heating expert after some scribbling. "Figuring 200 Btu per foot and 20% for piping and pick-up gives 271,680 gross load, not figuring the tankless."

"The tankless figures," put in the service man. "It supplies six apartments and a big lunch room.

fueloil & oil heat Short Short Article on Burner Service

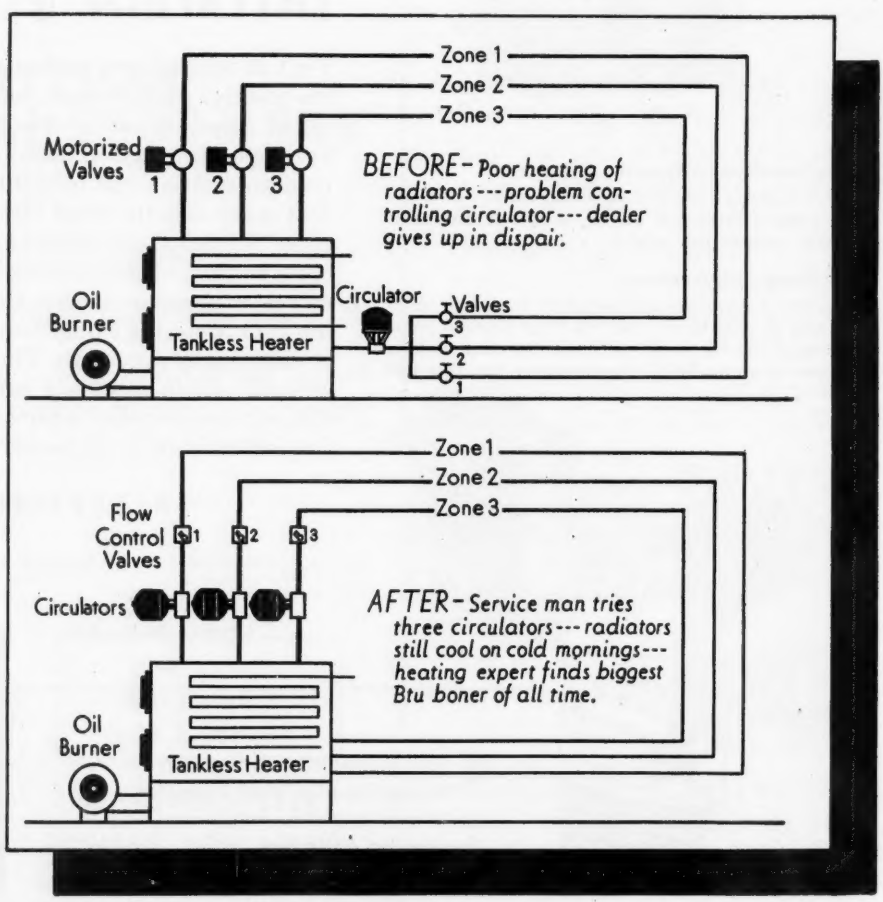
Commenting that the service man reasoned so well he should have started his reasoning earlier, the engineer phoned the contractor who had installed the job to begin with.

"Says he reasoned that never would all three zones call for heat at one time," he growled after hanging up. "Thinks the zones should alternate taking heat from the boiler. Maybe he thinks he put in too much radiation. But we see the radiation is just right for the load.

"Now for 271,800 Btu gross load plus the tankless, I figure you need a boiler good for 3.5 gph and fired 3.0 or 3.5 gph. The 2.0 gph boiler can't handle the three zone load at one time, for it chills with the three circulators running and that's why the three thermostats call for heat all day.

"The owner held back over $700 from the original contractor, who's not going back after it now because no doubt he realizes he's pulled the biggest Btu boner of all time. And the owner owes you $260 for your work. If you're going to see things through and make the job right, just put in a boiler for 3.5 gph. Incidentally, with that size boiler and controls that ran the circulator only when one of the zone valves was open, this job would have been good in the first place."

"I see now," said the service man miserably as he left, "and I made my biggest mistake when I started talking big to the owner.

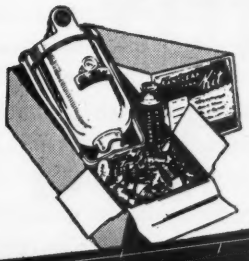


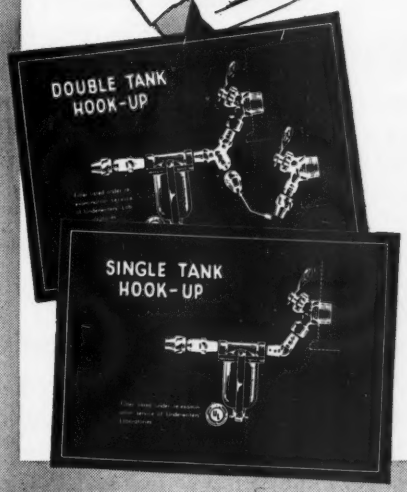
POPULAR DEMAND CREATES MORE PROFITS...WITH THIS FUEL OIL TANK

"KANTLEAK" Filter Kit

Custom Designed

- *Complete in One Package*
- *Low in Cost*
- *Compact for Space Saving*
- *Easy to Install*





PACKAGED FUEL OIL TANK HOOK-UPS SAVE YOU TIME AND MONEY . . .

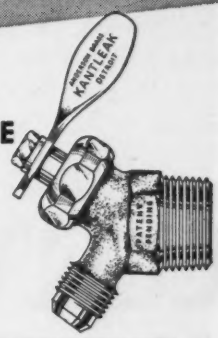
Our *KANTLEAK* Fuel Oil Tank Kits have solved a problem of lost time in your fittings department.

With the packaged *KANTLEAK* Kits you can handle any installation quickly and without spending a lot of time discussing piping, valves, fittings and filters. You just hand the customer a *KANTLEAK* Kit and a coil of copper tubing and he is on his way.

Ask your supplier about this profitable product.

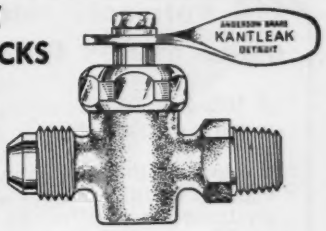
"KANTLEAK" Products LEAD THE INDUSTRY

OIL TANK VALVE



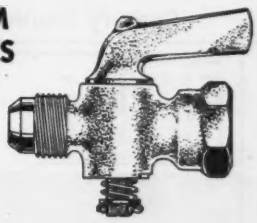
Our oil valves are designed to fit direct to fuel oil tanks or drums without the use of extra fittings. Handles hard-to-hold liquids without leakage.

KANTLEAK SHUT-OFF COCKS



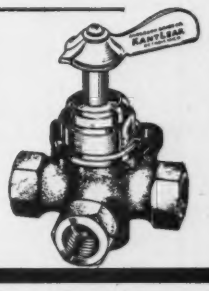
The perfect shut-off cock for oil, gas and similar installations. Designed with solid bottom and packed top to stop leakage completely.

SPRING BOTTOM SHUT-OFF COCKS



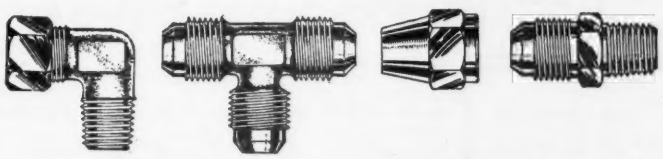
Low cost and complete satisfaction makes this a popular shut-off. Sizes and types for every need.

TWO TANK OIL VALVES



Designed for multiple tank hook-ups. This versatile valve gives trouble-free operation where hard-to-hold liquids are used.

COMPLETE STOCK OF BRASS FITTINGS



Fittings of all types and sizes — manufactured true as to thread dimensions and size to meet the most exacting conditions.

Write for your copy of our catalogs . .

Catalog 49 showing full line of brass shut-off cocks, valves and fittings.

Catalog 200 showing full line of *KANTLEAK* Fuel Oil Tank Kits.

ANDERSON BRASS COMPANY

5305 TWELFTH STREET, DETROIT 8, MICHIGAN

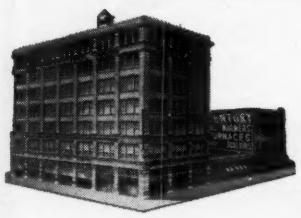
Manufacturers Activities

Steinen appoints five Field Representatives

APPOINTMENT of five new field representatives has been made by the Accessories Div., Wm. Steinen Mfg. Co., Newark, N. J. These additions make a total of 8 representatives covering 25 states for the Steinen organization.

John T. Lordan, Newton, Mass., one of the new appointees, will cover the states of Maine, New Hampshire, Vermont, Massachusetts and Rhode Island. The John E. Brecht Co., Cincinnati, is to operate in Indiana, Ohio and Kentucky and the Owen Engineering Co., Carbondale, Ill., in southern Illinois, eastern Missouri and the states of Arkansas and Tennessee. A. E. Olson, Minneapolis, will represent the company in Minnesota and H. J. Waff, Jr., Norfolk, in Virginia, West Virginia, North and South Carolina.

CENTURY



44 Automatic Heating Units can make money for you every day!

A Heating Dealer, who sells from a complete line, closes more sales and shows a larger net profit at the end of the year. Century specializes in fully automatic heating equipment and offers 44 units that enable an alert heating dealer to bid on the profitable automatic heating installations in the residential and commercial field.

Century equipment has a reputation for greater efficiency, dependability and lowered fuel costs that is the outgrowth of 26 years of service in automatic heating. It pays to sell the Century Line!

Century Engineering Corporation, Cedar Rapids, Iowa

- 6 Sizes of Oil HIBOYS 85-380 M/ B.T.U.'s
- 3 Sizes of Gas (Basement) 100-170 M/ B.T.U.'s
- 4 Sizes of Gas HIBOYS 85-150 M/ B.T.U.'s
- 2 Sizes of Oil Vaporizing 60-80 M/ B.T.U.'s
- 3 Sizes of Oil Gravity 70-140 M/ B.T.U.'s
- 3 Sizes of Oil Boilers 380-740 Sq. Ft. Radiation
- 3 Sizes of Gas Gravity 70-140 M/ B.T.U.'s
- 3 Sizes Oil Water Heaters 125-250 Gallons per Hour
- 6 Sizes of Oil (Basement) 105-380 M/ B.T.U.'s
- 4 Sizes: ¾ to 5 G.P.H. Conversion Oil Burners
- 3 Sizes of Oil (Basement) 100-170 M/ B.T.U.'s
- 2 Sizes: 5 to 20 G.P.H. Conversion Oil Burners

WRITE TODAY!
Some choice territories are open—let us tell you how you can build greater profits with an exclusive Century franchise.

- 2 Sizes: Conversion Gas Burners 87-250 M/ B.T.U.'s

CENTURY
The Finest in Automatic Heating Equipment.

Olsen acquires Factory Site at Hightstown, N. J.

ACQUISITION of a 30-acre site at Hightstown, N. J. has been announced by Olsen Mfg. Co., Elyria, Ohio. While there are no plans for developing the site at present, it is expected that a new plant will be erected there in the future. The new facilities would provide additional manufacturing capacity, but would not result in a general move from the company's present location at Elyria.

Gibraltar Boilers installed in Long Island housing Project

FRANKLIN UTILITIES, INC., Franklin Square, N. Y., has installed the heating systems in half of the 700 homes of the Forest City housing project, Wantagh, N. Y. Franklin installed systems consisting of oil boilers made by the Gibraltar Corp. of America, Brooklyn, N. Y., fired with Radiant and Selectrol burners in Sections 1, 2 and 4 of the project, totalling 350 homes.

This information is presented to correct the impression conveyed by the news item on page 128 of our February issue, the wording of which could have been interpreted to indicate that Federal Boiler Co., Midland Park, N. J., installed boilers in all, instead of half of the Forest City houses.

Penn Electric Bulletin Covers its boiler Controls

A BULLETIN, covering all boiler controls made by the Penn Electric Switch Co., Goshen, Ind., has been announced. Bulletin SLC-2-F describes boiler controls for temperature, pressure and vapor applications and offers ordering specifications for the six basic type of boiler controls manufactured by Penn.

Specifications include type designations, application information, temperature element and I.P.T. connector sizes, electrical specifications and roughing-in dimensions.

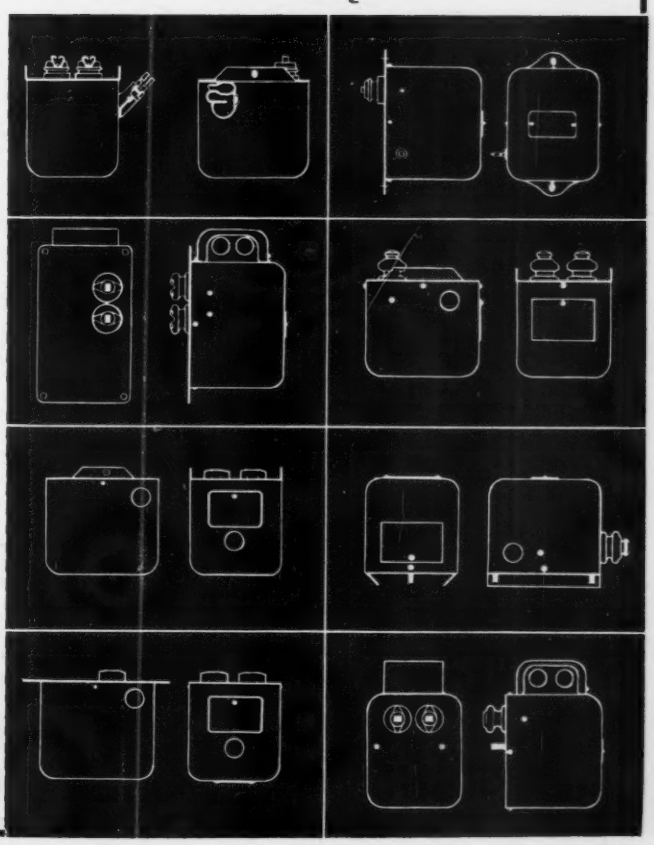
Cleaver-Brooks appoints Wymbs factory Representative

FRANK M. WYMBS has been appointed factory representative for the Cleaver-Brooks Hev-E-Oil Burner. He will ap-

PLAN NOW
TO PROVIDE
BETTER IGNITION
FOR
YOUR BURNER

We invite oil burner manufacturers and dealers to investigate the exceptional performance features of Acme Electric ignition transformers. These transformers have been designed to supply secondary current characteristics that we believe will make your oil burner installations more satisfactory by pleasing the buyer, by minimizing service calls. Carefully manufactured to high quality standards that are evidenced in the performance of the equipment you supply.

Available in mounting designs to exactly meet your needs. For testing samples and further information write.



ACME ELECTRIC CORPORATION
503 WATER ST. **CUBA, N. Y.**

Acme Electric manufactures Luminous Tube Transformers — Fluorescent Lamp Ballasts — Cold Cathode Lighting Transformers and Ballasts — Radio and Television Transformers — Electronic Transformers — Door Bell, Chime and Signalling Transformers — Oil Burner Ignition Transformers — Safety Transformers — Voltage Regulating Transformers — Step Down Transformers — Control Transformers—Warp-stop Transformers—Air Cooled Power Transformers

Acme ACME Electric
TRANSFORMERS

point distributors and dealers, with either exclusive or non-exclusive franchises, throughout the United States.

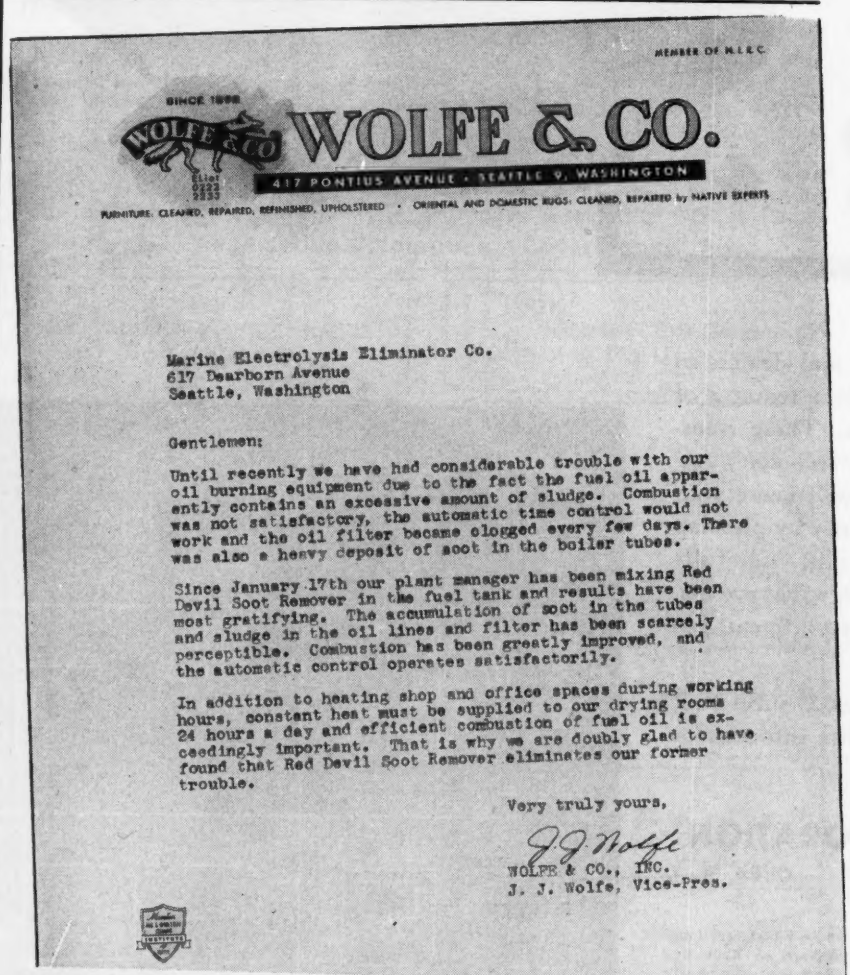
J. V. Resek, heading the oilheating division of the company, explains that Wymbs' appointment to the new post is the result of exceptional sales expansion during the past two years. He points out that 1950 sales were two and a half times those of 1949, which in turn had been double 1948.

Wymbs for some years has been the distributor for this burner in five Mid-Atlantic states from New York to D. C.

It's no Wonder . . .

RED DEVIL SOOT REMOVER

OUTSELLS ALL OTHER BRANDS COMBINED BY 2 to 1 ON LIQUID and 6 to 1 on POWDER in PACIFIC NORTHWEST!



MEMBER OF M.L.E.C.

SINCE 1898

WOLFE & CO.

417 PONTIUS AVENUE · SEATTLE 9, WASHINGTON

FURNITURE CLEANED, REPAIRED, REFINISHED, UPHOLSTERED · ORIENTAL AND DOMESTIC RUGS CLEANED, REPAIRED by NATIVE EXPERTS

Marine Electrolysis Eliminator Co.
617 Dearborn Avenue
Seattle, Washington

Gentlemen:

Until recently we have had considerable trouble with our oil burning equipment due to the fact the fuel oil apparently contains an excessive amount of sludge. Combustion was not satisfactory, the automatic time control would not work and the oil filter became clogged every few days. There was also a heavy deposit of soot in the boiler tubes.

Since January 17th our plant manager has been mixing Red Devil Soot Remover in the fuel tank and results have been most gratifying. The accumulation of soot in the tubes and sludge in the oil lines and filter has been scarcely perceptible. Combustion has been greatly improved, and the automatic control operates satisfactorily.

In addition to heating shop and office spaces during working hours, constant heat must be supplied to our drying rooms 24 hours a day and efficient combustion of fuel oil is exceedingly important. That is why we are doubly glad to have found that Red Devil Soot Remover eliminates our former trouble.

Very truly yours,

J. J. Wolfe

WOLFE & CO., INC.
J. J. Wolfe, Vice-Pres.

BROKERS — JOBBERS . . .

Some Middle West and Eastern Territories open—Write or Wire RED DEVIL SOOT REMOVER . . . Manufactured by

MARINE ELECTROLYSIS ELIMINATOR CO.
617 Dearborn St., Seattle 4, Wn.

Gerotor May obtains New oilburner Plant

A NEW PLANT, that will be devoted entirely to the manufacture of Quiet May oilburners and related equipment, has been acquired by the Gerotor May Corp., Baltimore, Md. Located in southwest Baltimore the building provides 20,000 sq. ft. of space.

Quiet May sales headquarters remain at Maryland Ave. and Oliver St., where Gerotor May's production facilities have been expanded to fill defense contracts for Gerotor hydraulic devices.

Electrol celebrates Its 32d Anniversary

A RECENT CELEBRATION marked the 32d anniversary of Electrol Burner Mfg. Co., Rutherford, N. J. R. F. Andler, president, took the occasion to outline the company's growth and the wide acceptance of Electrol oilfired equipment in home and industry. He said that more than 300,000 Electrol burners have been installed in homes and in every type of heating plant in general use, and paid tribute to sound engineering and production methods and the high calibre of exclusively franchised dealers as responsible for the wide use of the equipment.

Mr. Andler reviewed the features and improvements that Electrol has pioneered and outlined a comprehensive advertising and promotional campaign being undertaken in 1951.

NOW! boost oil furnace sales in spite of duct metal shortage!

H.C. Little Oil-Fired Wall & Floor Furnaces do NOT need warm air ducts

YOUR CUSTOMERS will prefer these oil furnaces that provide whole-house heating and save money on installation costs!

YOU will make more oil furnace sales because you will not be restricted by lack of sheet metal!

Here are fully automatic oil-fired wall and floor furnaces specially designed for small home use! These self-contained units (absolutely no ducts needed) provide a highly efficient flow of warm air throughout the home. Installation is easier and quicker. Operation is entirely automatic—patented H. C. Little electric ignition system has no pilot light to waste fuel! No motors, no fans, no moving parts of any kind to break down or need servicing!

BURN LOW-COST FURNACE OILS!

H. C. Little oil-fired wall and floor furnaces burn ordinary low-cost furnace oils—operating at top efficiency—assuring a substantial savings in fuel costs!

LOW-TEMPERATURE CARBURETION PRINCIPLE!

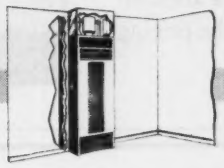
The patented H. C. Little oil burner in all H. C. Little furnaces operates on an exclusive LOW TEMPERATURE CARBURETION PRINCIPLE that *progessively* heats and vaporizes the fuel . . . prevents fuel "cracking" and therefore leaves no soot and no hard carbon deposits!

NO DUCTS NEEDED!
EASIER TO INSTALL!
SELF LIGHTING!
100% AUTOMATIC OPERATION

H.C. Little OIL WALL FURNACE

Ideal for houses without basement or built on concrete slab. Furnace is installed in partition wall and can be set flush to chimney flue. This installation method conserves floor space, permits wall-to-wall carpeting.

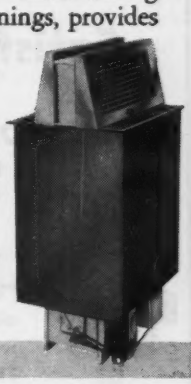
BTU PER HOUR HEAT OUTPUT 65,000



H.C. Little OIL FLOOR FURNACES

These automatic floor-flush oil furnaces provide uniform, whole-house heating without ducts! Large volume, warm air discharge through center of grille prevents drafts, assures well-distributed heat. Extra strong steel grille has narrow openings, provides safe walking surface, narrow heels will not enter. Absolutely silent operation!

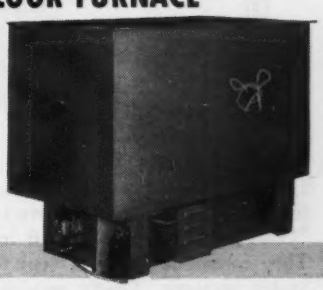
STANDARD REGISTER INSTALLATION—
Two sizes: 50,000 and 75,000 BTU PER HOUR HEAT OUTPUT.
DUAL WALL REGISTER INSTALLATION—
Two sizes: 55,000 and 80,000 BTU PER HOUR HEAT OUTPUT.



H.C. Little SHALLOW OIL FLOOR FURNACE

No need for basement or below-floor excavation! Specially made for homes where floor of house is unusually close to grade.

BTU PER HOUR HEAT OUTPUT 50,000



BOOST YOUR SALES VOLUME NOW WITH NO-DUCT
***H.C. Little* OIL FURNACES**

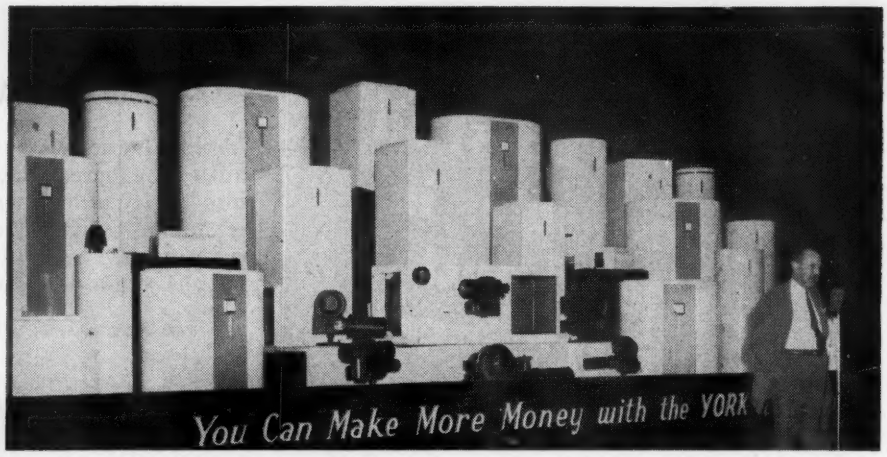
DEALER INQUIRIES INVITED
For full details about these amazing small-home oil furnaces write today to Dept. 3.

H. C. Little Burner Company
San Rafael, Calif.

Baltimore, Md.
Belmont, Mass.
Boise, Idaho
Chicago, Ill.
Columbus, Ga.
Detroit Lakes, Minn.
Fayetteville, N. Car.
Newark, N.J.
Portland, Ore.
Prescott, Ariz.
Reno, Nev.
St. Louis, Mo.
St. Petersburg, Fla.
Salt Lake City, Utah
Seattle, Wash.

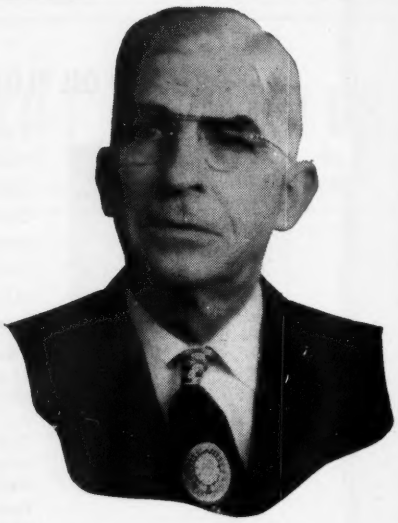
Miller Product acquires Clean Sweep soot Remover

MILLER PRODUCT CO., Lansing 9, Mich., for more than three months has been producing Clean Sweep soot remover under its new trade name "Clean Right." The Miller organization is a new company which acquired Clean Sweep and announces that, except for the change in name, the product will remain the same. No changes are contemplated in ingredients, in the pricing or packaging.



Dave Wepman, *merchandising manager, York-Shipley, Inc., York, Pa., presents the York-Heat great white line to the distributor organization at its recent national convention. Sixty-three models of boiler and furnace units, conversion burners and water heaters are included.*

"Rochester Gauges Mean Satisfied Customers"



"We've been in this business long enough to know that flimsy oil tank gauges are bound to cause trouble. That's a headache we avoid by using Rochester 'Dual-Dial' Gauges exclusively. Their dependability means satisfied customers and that means more business and fewer service calls for us."

Jay J Walsh

JAY J. WALSH, INC.
ROCHESTER, N. Y.

Like hundreds of other dealers, Jay J. Walsh has found that the dependability and positive leak-proof feature of Rochester "Dual-Dial" Gauges pay off in years of trouble-free service. They cannot leak oil or vent fumes into the basement, *even under pressure.* Costly service calls are reduced to a minimum. And the easy-to-read "Dual-Dial" can be seen from both front and back—makes checking and filling of tanks a snap.

Rochester "Dual-Dial" Gauges have been Underwriters' listed for over 25 years. Leading wholesalers everywhere stock them for basement fuel oil tanks in the following depths—22", 24", 26", 27", 42", 44" and 47"; 1½" and 2" pipe thread connections. Special lengths to order. Stock up today. ROCHESTER MANUFACTURING CO., INC., 8 Rockwood St., Rochester, N. Y.

SEE US AT THE NATIONAL OIL HEAT EXPOSITION BOOTH 450

ROCHESTER MANUFACTURING COMPANY, INC.

ROCHESTER DEPENDABLE ACCURACY GAUGES

DIAL THERMOMETERS GAUGES AMMETERS

Gulf's cracking Unit Incorporates new Designs

CONSTRUCTION of the huge fluid catalytic cracking unit with a reactor throughput of 60,000 bbls. per day, now being built for the Gulf Oil Corp. at Port Arthur, Texas, is incorporating new features worked out by The M. W. Kellogg Co., Jersey City, N. J. designers and builders of the unit.

The design features were developed to cut down initial cost and improve the operating efficiency of the process itself. The regenerator, for example, operates at a higher temperature than normally used to permit faster regeneration of the catalyst and decreases the amount of catalyst that must be circulated. Another change locates the stripper entirely within the reactor and a third supports the flue-gas exhaust stack atop the regenerator.

White mobilizes service And parts Operations

WHITE MOTOR CO., Cleveland, Ohio, has mobilized its service and parts operations to keep White trucks rolling during the national emergency. Formation of an Emergency Service Corps has been announced by J. N. Bauman, vice president, who describes it as a 10-point program to provide a systematic plan to keep available White parts on hand in localities where they

IT STANDS ALONE

THERE IS NOTHING LIKE IT IN THERMOSTAT DESIGN, CONSTRUCTION AND PERFORMANCE ✱ MOST HEATING ENGINEERS ARE FAMILIAR WITH ITS BASIC INHERENT SENSITIVITY, AND ITS NATURAL QUICK RESPONSE TO ROOM TEMPERATURE CHANGES, THEREBY ASSURING IDEAL HOME COMFORT THROUGHOUT COLD WEATHER CONDITIONS OF THE YEAR

SEE MERCOID CATALOG FOR COMPLETE INFORMATION

THE MERCOID CORPORATION ✱ 4201 BELMONT AV., CHICAGO 41, ILL.

are needed. The first step calls for registering all White equipment in service, and about to go into service, to show identifying features and to include estimates of part needs and service labor requirements.

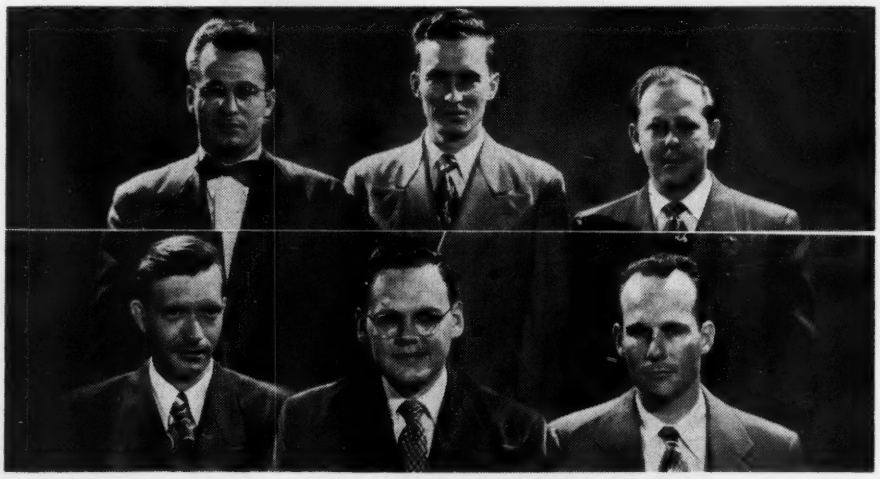
The Plan already has alerted the White organization to emergency needs for improved maintenance, new technical "know how" and additional materials to furnish owners with latest information on equipment care and handling. Regular bulletins will be distributed for late information on parts availability and maintenance.

Incorporated into the Plan are White's program of unit exchange for complete engines and a driver's manual prepared by the company to promote safety and proper maintenance methods, especially in emergencies.

Timken holds Series of Management Forums

A SERIES of Business Management Forums has been held for its dealers by the Timken Silent Automatic Div., Timken-Detroit Axle Co., Jackson, Mich. The first was held in Toronto on January 29 and 30, followed by sessions in New York on February 1 and 2 and Chicago on February 7 and 8. The purpose of the Forums was to convey to dealers the facts of the problems that confront them in the conduct of their businesses and to outline for them the thinking and plans of the company on which they can base sales programs in their own localities.

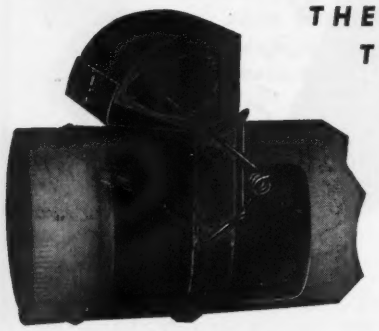
The program for both days included talks and discussions, delivered by fac-



Field engineers, *who have completed a 6-month training program at the factory of the Airtemp Div., Dayton, Ohio and have been assigned territories. Left to right, front row, they are: Robert S. Ambrose, stationed in Dallas, Texas; Robert L. King, who will work out of Chicago and William F. Walter, Atlanta, Ga. Back row, left to right: Paul R. Lint, assigned to the Washintgon, D. C. territory; Ralph J. Link, covering the Philadelphia area and Ole A. Christensen, assigned to Dayton.*

Buyers wise realize . . .

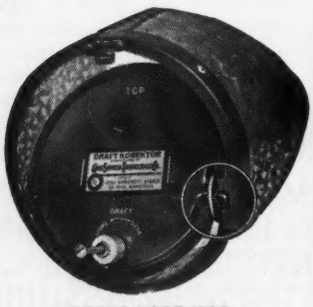
THERE'S ONE WAY TO DO THE JOB



COLE DRAFT GOVERNOR

Proven by thousands of installations . . . backed by years of solid service, COLE-SEWELL controls continue to provide the answer to proper barometric draft control.

COLE-SEWELL controls are made in a wide range of sizes for every type of heating and power plants. Consult us about your requirements.

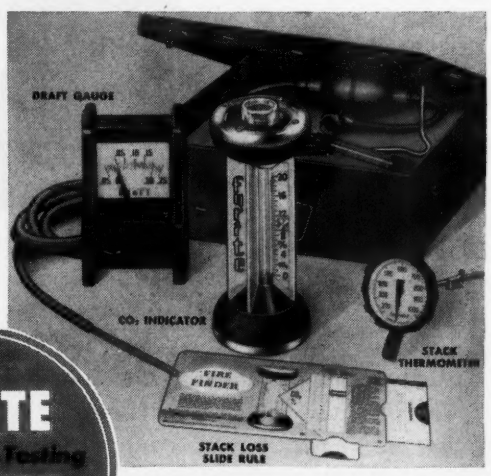


DRAFT KOREKTOR
No. 909

See Us At Booth 115
National Oil Heat Exposition
Chicago

COLE-SEWELL Engineering Co.

2282 UNIVERSITY AVE. ST. PAUL 4, MINN.



The FYRITE Combustion-Testing MASTER KIT

Helps You Build Profits and Prestige

Combustion-testing builds business in two ways. First, it boosts service profits because with instruments any service job can be done in less time and by less experienced men. Second, it brings in new equipment business by spotting fuel-wasting burners through a dramatic "fuel-saving" check-up which will convince even the most skeptical customer of the need for replacement or modernization.

Keying your sales and service to fuel conservation will work wonders for you. It will establish you as a "fuel-saving" expert and help you corner an even larger share of immediate and future sales in your community.

The MASTER KIT shown above will appeal particularly to those who want professional implements of highest quality and reliability, as well as of impressive display. The cost of the kit is very small compared to the sales and service profits it will bring you.

Ask your Jobber or Write for Bulletin 733

BACHARACH Industrial Instrument Co.

7000 BENNETT STREET • • PITTSBURGH 8, PA.

why sell just "furnaces"— when you can sell *Shirtsleeve Comfort*

Oh, man!—how's this for a picture of *Shirtsleeve Comfort*? Pretty solid, isn't it?

Mister, that's what you've got to sell—*what will sell for you!*—when you handle Ingersoll Heating Equipment. That's because *Shirtsleeve Comfort* is engineered right into all Ingersoll units.

Whether gravity or forced air, highboy or lowboy, big job or little, every Ingersoll unit is designed and built for better performance, longer life, lasting comfort. And there's a model and size for practically every warm air heating need.

To help speed your sales and profits, there's a big array of hard-hitting sales and advertising helps, cooperative ad plan, factory engineering assistance on the tough jobs. *Plus* the reputation of Ingersoll and Borg-Warner for finest quality products to back you up all the way.

So why sell just "furnaces" when you can really go places with *Shirtsleeve Comfort*—against any kind of competition! Mail that coupon down in the corner for all the interesting details.

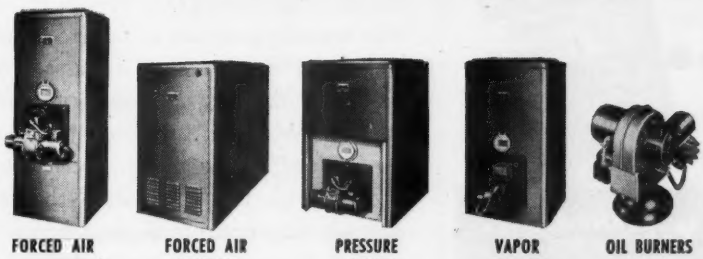
DISTRIBUTORS —DEALERS!
Mail coupon for details

© 1961, INGERSOLL PRODUCTS DIVISION

Ingersoll
HEATING EQUIPMENT
for Shirtsleeve Comfort

ENGINEERING B-W PRODUCTION

INGERSOLL PRODUCTS DIVISION
Borg-Warner Corporation
Kalamazoo, Michigan



FORCED AIR HIGHBOY | FORCED AIR LOWBOY | PRESSURE GRAVITY | VAPOR GRAVITY | OIL BURNERS

INGERSOLL PRODUCTS DIV., *Borg-Warner Corp.*
Dept. FO-1 Kalamazoo, Michigan
We're interested! Rush literature and details for:
☐ Franchise Distributorship ☐ Dealer
Send us literature, too!
☐ Architect ☐ Contractor
NAME_____
COMPANY_____
ADDRESS_____
CITY_____ STATE_____

Fuels & Oilheat

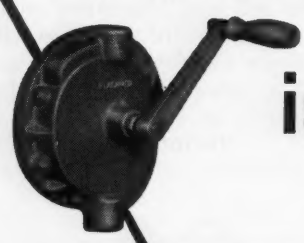
tory personnel and assisted, on some subjects, by Timken dealers. Participants from the factory included: T. A. Crawford, W. J. Chappell and R. M. Marberry.

Meyer Furnace offers Furnace Service Campaign

A COMPLETE PROMOTIONAL PROGRAM is available to Weir-Meyer dealers for use in promoting the sale of replacement warm air furnaces. Prepared by the Meyer Furnace Co., Peoria, Ill., the campaign consists of a program whereby the dealer sells a homeowner a Service Insurance Policy, under the terms of which he agrees to make a certain number of calls during the heating season to inspect the homeowner's furnace. During these calls the furnace is checked and adjusted. Provision also is made for emergency service.

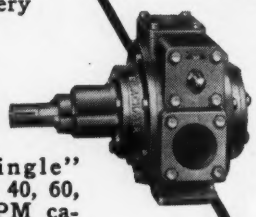
Material for the campaign is contained in an attractive folder, containing a 20-page instruction manual on the conduct of the program, along with samples of the supplies that will be needed. The Meyer Furnace Co. furnishes the supplies to its dealers. The company is urging its dealers to concentrate on the furnace replacement market to enable them to secure installation contracts that will call for a minimum of sheets, pipe and fittings and minimize the impact of present and future shortages.

IN HAND PUMPS...
AS IN TRUCK PUMPS
BLACKMER *leadership*
is Performance PROVED!



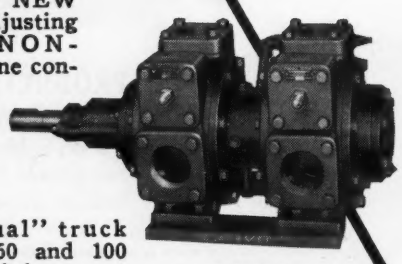
Blackmer offers the world's largest line of time-tested, dependable hand pumps of finest quality for every requirement.

FOR MORE THAN 45 YEARS Blackmer Pumps have been most consistently favored by "oil men." With minimum care, Blackmer Pumps outlast all equipment with which they are used. You can get no better pumps than Blackmers for your petroleum-handling needs.



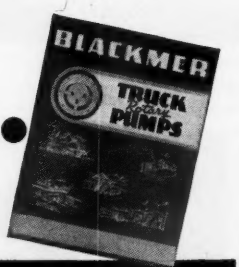
BLACKMER PUMPS lead all others in design improvements in truck pumps. With Blackmer Pumps oil marketers invariably gain profitable delivery time and lower operating costs, thereby increasing profits.

Blackmer "single" truck pumps in 40, 60, 100 and 200 GPM capacities feature NEW QUIET "self-adjusting for wear" NON-METALLIC vane construction.



Blackmer "dual" truck pumps in 40, 60 and 100 "twin" capacities meet legal requirements in handling "split load" deliveries efficiently from compartmented trucks. Contamination of products is entirely eliminated.

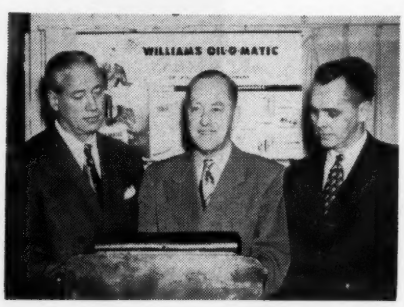
WRITE FOR TP3 BULLETIN CONTAINING DETAILS OF BLACKMER TRUCK PUMPS



BLACKMER PUMP COMPANY GRAND RAPIDS, MICHIGAN

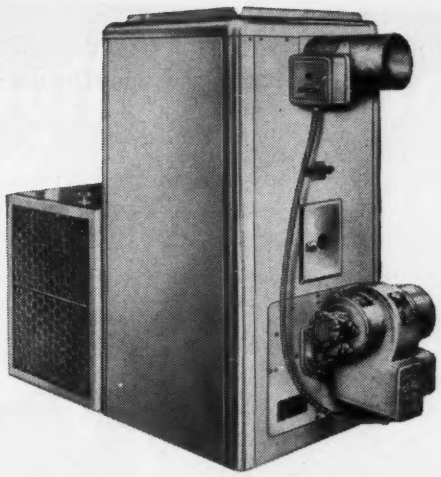
Oil-O-Matic holds annual Sales Meeting at Factory

AN INTENSIFIED and aggressive 1951 sales program, notwithstanding the possibility of cutbacks in production, keynoted the annual sales meeting of the Williams Oil-O-Matic Div., held at the Eureka Williams Corp. plant in Bloomington, Ill. E. H. Davison, Oil-O-Matic general sales manager, explained why a highly aggressive selling program would be mandatory this year and stated that the division was undertaking its most intensive selling program on the premise that competition will be keener than ever in 1951.

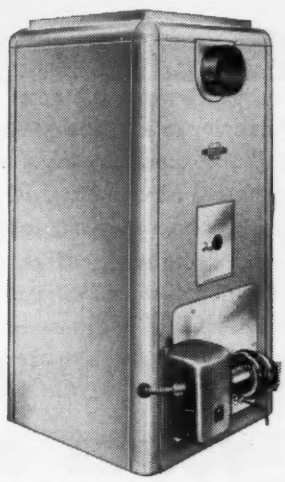


Left to right: *Messrs. Casler, Davison and Pinkerton shown at the speaker's stand during one of the sessions of the week-long meeting.*

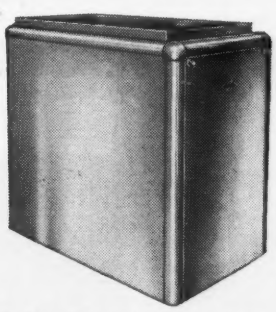
L. A. Casler, recently appointed executive vice-president of Eureka Williams and manager of its Williams Div., outlined product expansion plans and a stepped up advertising and promotion campaign, while T. H. Green, manager of dealer activities, revealed that a Sales Management Manual for Oil-O-Matic dealers will be available shortly. Full details of a special retail sales training program on furnaces and boilers for dealers were discussed by R. G. Pinkerton, manager of unit sales. H. W. Burritt, president of the corporation, brought the meeting to a close with the observation that if defense requirements do not become critical, the programs outlined during



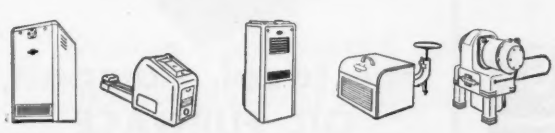
Delco-Heat "OPC" Conditionairs—a value-priced line of forced air furnaces with pressure atomizing oil burners. Blower filter unit may be bottom or back mounted. "Reverse flow" model, and de luxe model with matching blower and furnace units, also available.



Delco-Heat "OVC" Conditionairs—especially low-priced models for the builder and small home markets. Two stage vaporizing oil burners. "OVC" Conditionairs come in both gravity and forced air models.



Delco-Heat "DA" Conditionairs—the finest oil-fired, forced warm air furnaces available! Five models in capacities from 85,000 to 200,000 Btu output. Powered by famous Delco-Heat "Rotopower" oil burners.



Oil-fired Boilers | Stokers | Gas Conditionairs | Gas Burners | Oil Burners

Also manufacturers of electric water systems for farms and homes

The Delco-Heat line offers features that sell—at prices that mean profits!

A new home heating unit isn't an "everyday" purchase to your customers—it's a major investment. Naturally they look for a name they can trust. They insist on top quality and dependability. And they want all this at the lowest possible cost.

When you sell Delco-Heat Conditionairs, you are able to offer unmatched quality and dependability. *Yet Delco-Heat units are priced competitively.*

Yes, it's easier to sell the products of a manufacturer whose research, engineering and advertising facilities will keep those products out front. And Delco Appliance, a division of General Motors, is just such an organization.

Delco Appliance, following the General Motors' policy of "more and better things for more people," manufactures the kind of automatic heating equipment that customers want—at prices they can afford to pay. This policy is one on which each Delco-Heat Retail Distributor can base a sound business for himself.

GENERAL MOTORS DELCO-HEAT

If you are interested in more information about a Delco-Heat franchise, send the coupon below.

CLIP AND MAIL TODAY!

DELCO APPLIANCE DIVISION, Dept. FO-23
General Motors Corporation, Rochester 1, N. Y.

Please send me information about a Delco-Heat franchise.

Name _____

Firm Name _____

Street _____

City _____ *Zone* ____ *State* _____

fuel oil heat

the meeting will result in a "record-breaking" year for Oil-O-Matic.

The field men in attendance witnessed a striking demonstration of the model Fifty-Ten oilburner during the week-long meeting. The structural stability of the unit was demonstrated by its ability to remain in full operation when pounded with mallets, kicked, weighted down and turned at various angles.

Delavan acquires rights To Hally nozzle Filters

EXCLUSIVE RIGHTS for the manufacture and sale of Hally nozzle filters have been acquired by Delavan Mfg. Co., Des Moines, Ia.

Invented by William W. Hallinan, the device is an all metal filter with rigidly controlled openings, the smallest of which is .00075 inch. This is designated No. ¾ size for nozzles with capacities from .5 to .65 gph. No. 1 size, with openings of .001 inch, is for nozzles from .75 to 1.10 gph; No. 2 size, .002 inch openings, from 1.20 to 1.65 gph and No. 3, .003 inch openings, from 1.75 to 3.00 gph.

Form Power Reels, Inc. to Make and market hose Reels

FORMATION of Power Reels, Inc., Buffalo 22, N. Y., has been announced, to produce and market power hose reels, its organization explained as an outgrowth of the demand for the units originally designed by the R. H. Wishman Co.

The Power Hose Reel incorporates an internal gear-driven mechanism,

The millionth booster pump *produced by Bell & Gosset, Morton Grove, Ill., is shown being given to E. J. Gossett, president, by C. E. Pullum, vice-president in charge of production. Watching are: Left to right, Ernest Kersten, factory superintendent; H. A. Lockhart, chief engineer; Mr. Pullum; Mr. Gossett; R. E. Moore, vice-president in charge of sales; Ralph A. Patterson, general sales manager and William A. Boone, assistant sales manager.*

In days of short supply it's important that you get yourself into the best possible position in regard to the supply of the furnaces you sell. Important? *Essential!*

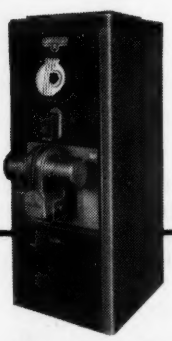
Look at the Armstrong distribution map. Two huge plants to serve both sides of the continent quickly, economically. A warehousing distributor within a stone's throw of *everywhere*. That means quick action on deliveries . . . a nearby inventory without inventory investment . . . close-at-hand engineering and sales help.

It's good to know, too, that Armstrong is trustworthy. We'll play fair with the steel we get. That's true if materials are assigned on the basis of past volume, present orders or future prospects. These materials will continue to be applied to a full selection of warm-air furnaces—for firing with oil, gas or coal.

Drop us a line. Make us prove how our system is made-to-order for the rough days ahead.

ARMSTRONG FURNACE COMPANY
COLUMBUS, OHIO — DES MOINES, IOWA

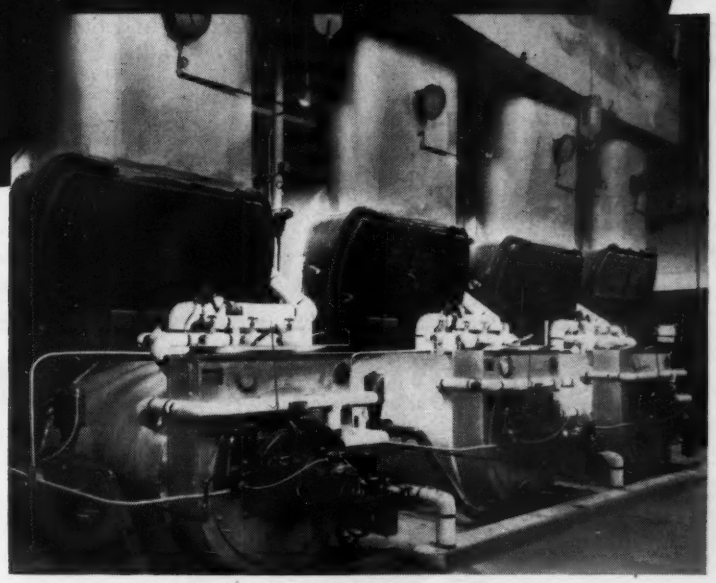
Please address Dept. FO at our plant nearest you
Warm-Air Furnaces—Oil, Gas, Coal—A Complete Line



The Ideal, Compact OIL FURNACE

Compact size is essential for utility-room installation, but *so are efficiency and attractive appearance.* They're *all* wrapped up in this Armstrong L6-110 Gun-Type Oil Hi-Boy. Powerful *twin* blowers assure effective heat transfer and distribution. First-class construction minimizes service needs. Write for specifications.

Another Outstanding Installation of Ace UNIFLOW Oil Burners



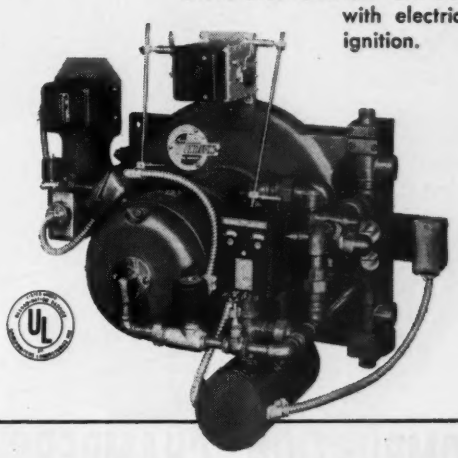
Three ACE UNIFLOW Oil Burners installed at Greenwich High School, Greenwich, Conn. Albert Fentzlaff, Inc., Engineers; Merit Oil Heating Corp., Mt. Vernon, N. Y., Contractors.

In commercial and industrial buildings throughout the country — wherever the finest heavy oil burning equipment is desired—you'll find ACE UNIFLOW Oil Burners .

At the Greenwich (Conn.) High School, three ACE UNIFLOW Oil Burners were selected by the Board of Education for the unusual installation shown here. To eliminate the need for raising the boilers, because of an unsatisfactory water condition, water wall furnace extensions were used.

This installation, designed and supervised by the ACE distributor for Connecticut—Arthur C. Beningson, of Stamford—is just one of the many applications of ACE UNIFLOW Oil Burners where their outstanding performance and dependability insure finest value in heavy oil burning equipment.

Type DREH fully-automatic, direct drive Ace Uniflow Oil Burner with electric-gas ignition.



TEN SIZES GIVE FOLLOWING RANGE OF CAPACITIES

	Gallons Per Hour	Boiler H. P.	Square Feet Steam Rad.
Minimum	4	12	1,600
Maximum	165	500	66,000

Ace UNIFLOW OIL BURNERS ®

"Custom Engineered for Discriminating Buyers"

DEALERS AND CONTRACTORS . . .

Manufacturing horizontal rotary oil burners is our ONLY business—not a side line. Our entire efforts have been, and will continue to be, devoted exclusively to the design, engineering and sale of heavy fuel oil burning equipment through authorized dealers.

Write us for full details — or see us at the O.H.I. Show, Navy Pier, Chicago, April 2-6, at booth 106.

ACE ENGINEERING COMPANY

1435 WEST 15th STREET • CHICAGO 8, ILLINOIS

swing joint with removable packing seal, ball bearings on all mountings, no clutch and a special elbow to prevent hose kinking. In addition, a line of hand-operated reels and an explosion-proof model of the power-operated reels are available.

Complete indoor climate Control seen for Future

C. S. KOEHLER, Minneapolis-Honeywell Regulator Co., Minneapolis 8, Minn., addressing a recent panel meeting on indoor climate control sponsored by the Producer's Council in New York City, predicted that the building of the future might be pressurized as well as scientifically heated and cooled. "Since we now have electronic temperature and humidity controls virtually capable of anticipating weather changes, we may soon have controls to regulate pressures in residential and commercial buildings," Mr. Koehler said.

He explained further that the electronic control system is 100 times more sensitive than ordinary set-ups and is regarded as a most practical means for controlling radiant floor panel heating. Basically, the control is achieved through a three-way thermostatic system, including an outside and inside thermostat and a sensing element in the water line. Mr. Koehler cited the ranch-type house, with increased glass areas and a variety of exposures as creating the greatest need for new concepts of indoor climate control.

ENGINEERED FOR THE JOB!
S·O·S
THAT'S M' BOY.
SERVICE
• QUICKLY INSTALLED •
• "SKIN-HEAT" IN SECONDS •
• STANDS-UP FOR YEARS •
The World's Finest
COMBUSTION CHAMBERS
HARD BRICK OR INSULATING FIRE BRICK
Cast in revolutionary patented shapes that fit together instantly.
NO TOOLS, NO BANDS, NO CLIPS
NO CEMENTING, NO CUTTING
Makes round, square, rectangular, or pear shape to fit any boiler made.
AVAILABLE AT YOUR WHOLESALER
If he cannot supply you write
S.O.S. PRODUCTS COMPANY, Inc.
282 - 284 Nassau Avenue
Brooklyn 22, New York
Serving the Plumbing, Heating and Oil Burner Industries with 24 leading chemical and refractory products. All S.O.S. Products are sold with a money back guarantee.

Coastal Oil moves Its executive Offices

COASTAL OIL COMPANY has completed removal of its executive offices to the National Newark Building, 744 Broad Street, Newark 2, N. J. The telephone number remains unchanged.

Ray issues condensed Catalog of Oilburners

A CONDENSED 16-page catalog in color has been issued by the Ray Oil Burner Co., San Francisco 12, Calif., providing a complete listing, with illustrations, of fully automatic horizontal rotary oilburners, steam turbine driven type, combination gas-oilburners, semi-automatic models and pressure atomizing burners.

The booklet contains a selector chart, plus specifications and capacities for each type. Operation and control of each unit is described in detail.

Kresno-Stamm issues Canadian Catalog

FIFTY-THREE pages in the catalog prepared by the Canadian Division of Kresno-Stamm Mfg. Co., Palisades Park, N. J., contains information on the company's line of oilheating equipment, along with a complete collection of oilburner accessory items. Sizes and specifications are given for Kresno-Stamm's pressure atomizing and vaporizing oilburners, including capacities and suggested applications.

An alphabetical index is provided to facilitate location of specific items in the catalog, which lists trade prices, sizes and technical information about each.

Monograms issues second Printing of reference Table

THE LITE-CAST Combustion Chamber Reference Table has been issued in a second printing by Monogram Prod-

Smart Contractors KNOW A GOOD THING WHEN THEY SEE IT!

Today, contractors all over the country are using *A. S. M. E. FEDERAL BOILERS* to answer their many heating problems. If your specifications call for a Low Cost, Oil or Gas unit, that is Easy To Look At, A Snap To Install and Service, and will Work Like a Charm, specify *FEDERAL BOILER*.

efficient Factory tested under abnormally high hydrostatic pressure. This and many other rigid tests assure Federal Boilers ability to withstand hard use and give years of perfect service.

accessible Quick, easy servicing. A single operation makes internal parts readily available. No more back-breaking, time consuming cleaning or servicing.

attractive Handsome, two-toned (blue and grey) baked enamel, hammertone finished jacket. Built of heavy gauge sheet steel and glass wool insulated.

durable Rugged construction and precision engineering assure trouble free installation and a lifetime of use.

FEDERAL LOW COST BOILERS

ASK YOUR JOBBER ABOUT FEDERAL'S LOW COST OIL OR GAS FIRED BOILERS

MODEL #FVW For small low cost homes with radiant heat, hot water or steam. 66,000 to 96,000 net B.T.U. output.

MODEL #FC Oil or gas fired unit, ideal for use with hot water heating systems, radiant heat or steam. 77,000 to 312,000 net B.T.U. output.

MODEL #FD Best suited for launderettes and commercials. A stoker, oil or gas fired unit. 360,000 to 528,000 net B.T.U. output.

FEDERAL BOILER COMPANY, INC.

GRANITE & WEST ST., MIDLAND PARK, N.J.

General Offices: 2610 E. TREMONT AVE., NEW YORK 61, N. Y.

FEDERAL BOILER CO., INC.,
General Offices
2610 E. Tremont Ave., Bronx 61, N. Y.
Please send me free bulletins.

Name.....

Address.....

ucts Co., Philadelphia 4, Pa. Requests for copies of the initial printing of the 36-page booklet were so great that the supply was exhausted within two months. Copies of the new booklet can be secured from Monogram by writing to the company at 731 North 35th St. and requesting one.

The table lists a great majority of boilers made and shows the corresponding model number of Lite-Cast combustion chamber which is adaptable. It is described as a valuable guide for jobbers and dealers in supplying and selecting the proper combustion chamber for oilburning installations.

Sid Harvey distributes Largest profit sharing Bonus

THE PROFIT-SHARING BONUS distributed by Sid Harvey, Inc., Valley Stream, N. Y., and associated companies in Massachusetts, New Jersey, Pennsylvania and Maryland, during 1950 was the largest in the company's history. A total of more than $75,000 was voted in 1950, nearly double the sum given out in 1949.

Amounts awarded were paid in cash to employees of the associated companies and to main plant employees through a profit-sharing trust, begun in 1944. Under the trust employees receive cash payments of two-thirds of the amount due, with the balance payable when the trust matures.

Berger acquires new Site for Expansion of Manufacturing

NEW BUILDINGS and land, covering 10 acres in Belle Vernon, Pa., have been acquired by the Berger Furnace Mfg. Co., Pittsburgh, Pa., providing 200,000 sq. ft. of additional manufacturing space. Modern equipment, tools and production procedures are being installed here for the manufacture of Leader and Berger furnaces and winter conditioners, ductwork and fittings, grilles and other heating specialties.

General offices of the company remain at Pittsburgh, with the new plant dedicated to the service of its customers to provide in increasing quantities and at competitive prices the Berger line of heating equipment. Also, new products and merchandising tools will be developed.

Parke-Hill Chemical appoints Sales Manager, Representative

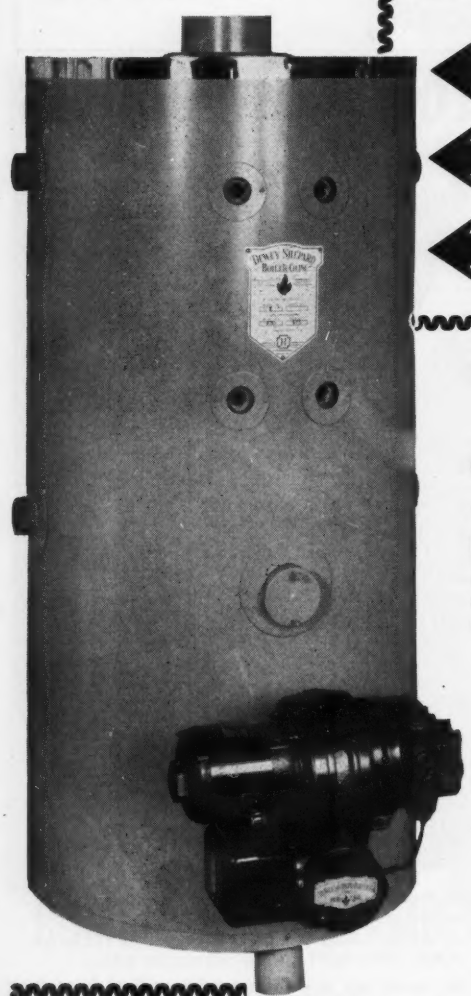
APPOINTMENT of Leonard E. Simon as general sales manager has been announced by the Parke-Hill Chemical Corp., Mt. Vernon, N. Y., manufacturers of a complete line of heating chemical compounds. Joseph London also has been added to the staff as district representative in the Connecticut district.

Tankit moves Office and Factory to Newark, N. J.

THE TANKIT CO., manufacturers of oil equipment, including tank leak repair kits and Neutrol, fueloil deodorant, recently moved from Cedarhurst, N. Y. to Newark, N. J. Executive offices are located at 17 Shephard Ave., a manufacturing plant and warehouse at 4 Dewey St.

Honeywell prepares two more Slide-rule heating Guides

A SLIDE-RULE GUIDE, available from Minneapolis-Honeywell Regulator



Ready to Install
DEWEY-SHEPARD
OIL OR GAS
BOILERS

YOU GET 80% OR MORE HEAT ABSORPTION WITH
the Tube within a Tube

This "Tube within a Tube" action results in pre-heating the incoming cold water before it comes in contact with the metal surfaces to which radiant heat is being applied. By this application you offer your customers many advantages such as:

- LESS FUEL USED
- LOWER INSTALLATION COST
- NO LIME—NO SCALE
- 20% LESS HEAT LOSS THROUGH THE STACK
- NO EXPANSION, CONTRACTION OR CONDENSATION
- CLEANEST HEAT POSSIBLE
- SUFFICIENT HOT WATER AT ALL TIMES

Easy application to all hot water systems.

- TWO PIPE
- ONE PIPE
- CONVECTOR
- PANEL & RADIANT
- SUMMER-WINTER HOOK-UP

In the "Tube within a Tube" boiler there is one square foot of heating surface for every gallon of water. This method transfers every possible unit of heat to the water and results in EFFICIENT AND ECONOMICAL OPERATION.

Write Today — Get descriptive literature, prices and other information.

DEWEY-SHEPARD
BOILER COMPANY, INC.
1311 NO. CAPITOL AVENUE • INDIANAPOLIS 4, INDIANA

PECORA
BRAND

ASBESTOS
Retort Cement

Sets A Standard of Excellence For The Heating Industry

Here is a cement, developed by Pecora, to specifically meet the exacting requirements of installations that must cope with wide temperature extremes... a practically indestructible binding material that is absolutely fire-proof... resistant to acids and corrosion... burns hard without cracking and is completely odorless... non-porous and not subject to air leakage. Pecora Asbestos Retort Cement is the ideal material for mounting furnaces, heaters, stoves... for cementing joints exposed to intense heat. Iron will melt where this cement will stand!

A Superior Product Designed For Superior Workmanship

PECORA
PAINT COMPANY, INC.

ALSO: PECORA FURNACE CEMENT
A heat-resistant cement for sealing or joining of parts subjected to high temperatures.

PECORA Fibroid STOVE PUTTY
A durable, dependable sealing compound that will maintain an air-tight seal despite vibration.

315 SEDGLEY AVE., PHILADELPHIA 40, PA.
Manufacturers of Caulking Compounds, Roof Coatings, Maintenance Finishes, Industrial Enamels
SPECIFY PECORA AND YOU SPECIFY QUALITY

Kresky "sells" the Ladies

KRESKY OIL FLOOR FURNACES GIVE HOMES UP TO 36 SQUARE FEET OF *EXTRA* FLOOR SPACE

Compact Kresky Oil Floor Furnaces don't *take* room —THEY MAKE ROOM. They go *under* the floor, out of the way. Homes seem larger... more attractive.

EASY KRESKY INSTALLATIONS MEAN *YEAR-ROUND* SALES PROFIT

You can sell and install Kresky Oil Floor Furnaces *anytime.* They're on the job so fast, homes don't even cool off. Kresky helps you maintain sales volume and keep servicemen busy when other business is slow.

"LIVE" BURNER DEMONSTRATION MAKES KRESKY SELLING EASIER

Let Kresky's clean, smoke-free flame sell prospects *right in your store.* Don't tell 'em... SHOW 'EM why Kresky gives more heat and cuts fuel bills.

DON'T FORGET that Kresky Dealers rang up *one-fourth* of America's TOTAL oil floor furnace sales in 1950, '49, '48, and '47!

Let a Kresky District Representative blueprint *your* share of this big slice of national sales profits. If you'd like him to call, or if you want more information right away, fill in and mail the coupon below.

MAIL TODAY!

KRESKY MFG. CO., INC. 351-FOH
2nd Street, Petaluma, California

☐ Ask your District Representative to call and pinpoint Kresky's market in my area.
☐ Send me complete facts and figures on Kresky Oil Floor Furnaces.

NAME_____ COMPANY_____

ADDRESS_____ CITY_____ STATE_____

Co., Minneapolis 8, Minn., has been designed to help determine the proper thermostatic control for radiant panel heating. Second in a series, the guide makes it possible to calibrate quickly the outdoor and indoor thermostats used with the company's electronic control system for radiant heating.

Another similar guide is designed to show how to save on the fuel bills of apartment, hotel and office buildings, by pointing out how wind effect may double a building's heat loss and illustrating the proper length of burner operation in proportion to outside temperature. Purpose of the guide is to demonstrate how Honeywell's "weatherstat" outdoor controller automatically provides for effiecient heating system operation.

Metromatic names Distributors For Metropolitan New York

METROPAC SALES DIVISION of the Metromatic Mfg. Co., Everett, Mass., has appointed the Feb Mar Co., New York 11, N. Y., as exclusive distributor in the entire metropolitan New York area.

J. B. Forbes is president of the company, which will handle Metropac heating units, combining a furnace and domestic hot water heater.

Double-duty Display For Viking Humidifier

A DOUBLE-DUTY counter display has been developed by the Viking Air Conditioning Corp., Cleveland 2, Ohio, for its new 2300 humidifier. The display simulates a furnace plenum to illustrate how the unit will fit any type furnace.

The backboard of the three-dimensional set-up catches the eye with a story of health and comfort benefits from the humidifier, with the front section rounded and sloped like a plenum. A humidifier is installed in this section, with the top of the section open to show the position of the unit inside a furnace.

Resembling an actual working installation the display enables a salesman to remove the access plate to show how the unit slides into the furnace, to uncover the tank to demonstrate operation and accessibility of the control mechanism, to point out the printed evaporator plate set in the rack with the real ones telling about their functions and remove the unit completely and show the method of attaching the frame to the furnace with six metal screws.

Wheelco appoints Washington, D. C., Outlet

APPOINTMENT of Ansell & Goda as district agency in the District of Columbia, Virginia and part of Maryland

DELTA .....
America's Best Buy
in AUTOMATIC HEATING

and your best buy too!

BOILER-OIL BURNER UNIT
Steam from 320 to 1100 Sq. Ft.
Water from 200 to 1760 Sq. Ft.
Bilt-in Tankless Coil
A.S.M.E. Construction
←Extended Flush→
Equipped with NEW MAGNESIUM ANODE "LIFE" ROD — protects boilers against corrosion

OIL-FIRED FLOOR FURNACE
• Fully wired and assembled
• Floor area only 2' x 2'
• 50,000 BTU Commercial Standards
• Smokeless-Sootless Burner
FORCED DRAFT BLOWER

CONVERSION OIL BURNER
Available from ¾ to 16 GPH

DELTA DUAL-WALL FURNACE
WITH CIRCULATING BLOWER FAN
• Thermostat controlled
• All parts easily accessible for servicing
• Output 52,000 BTU's
• Factory assembled

FORCED WARM-AIR OIL UNIT
• Flange-mounted oil burner
• Durable—Efficient twin-heat exchanger
• Pre-cast Bilt-in combustion chamber
• Output 90,000 BTU's
• Large blower
• Factory assembled

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AND PRICED RIGHT!

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Sentry

AT-A-GLANCE

REMOTE and DIRECT READING

TANK GAUGES

FOR BASEMENT TANKS: Type D-O for 2" openings, Type D-10 for 1½" openings.

For accurate, easy reading of tanks — indoors, outside or underground.

FOR UNDERGROUND TANKS: Type D-U, shown at right, for 2" openings only.

Left: Standard type At-A-Glance Gauge for direct reading at storage tank. Also available with special fitting for use and adaptation with remote gauge indicators to permit dual readings — both at tank and outside.

Dependable, Inexpensive, Weatherproof... Simple Mechanical GAUGES, Easy to Install

Accurately indicates liquid level in remote storage tanks at all times — Not affected by specific gravity oil changes or variations. Simplified mechanical operation eliminates unnecessary fittings, bulbs or levers for oil men to tamper with — no need for access to building. Can be installed for dual location readings — *indoors* and *out*. Non-corrosive stainless steel and brass extension lines connect tank float with cast aluminum, weatherproof, thermometer type indicator — calibrated in fractions. Easy to read, unconditionally guaranteed. Write for folder showing complete line.

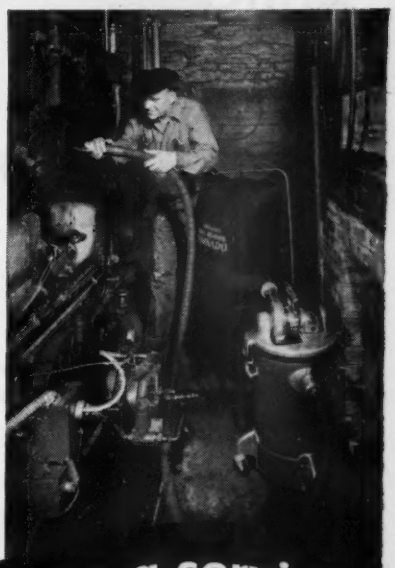
KRUEGER *Sentry* GAUGES

GREEN BAY • WISCONSIN

TORNADO®

...powerful, efficient, sturdy, furnace and boiler cleaner!

Tornado furnace and boiler Vacuum Cleaners are specialized machines that quickly and thoroughly remove all heavy, clinging greasy soot from every part of the entire heating system. Powerful suction is maintained throughout the cleaning operation. Large dust and dirt-proof, double thickness bag and large capacity steel tank catch and retain all soot and dirt. Complete set of attachments for every cleaning requirement. 3 models to select from.



A profitable extra service!

Leading coal and fuel oil companies have built up a profitable business and increased the number of customers by offering a Tornado furnace and boiler cleaning service. Get the details today.

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5100 N. Ravenswood Ave., Chicago
Please send us your Bulletin No. 581.

Name_____

Address_____

City_____ State_____

FREE! Bulletin 581

BREUER ELECTRIC MFG. CO

CHICAGO 40, ILL.

has been announced by Wheelco Instruments Co., Chicago 7, Ill. The agency recently opened a new office at 3432 Connecticut Ave., N. W., Washington 8, D. C. The former agents in the territory, The Phipps & Bird Co., are to continue as an authorized resale agency for Wheelco.

Lindy Heaters distributes Calendars to the Trade

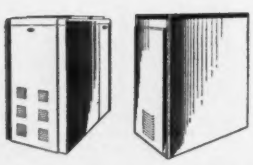
A 1951 CALENDAR has been distributed to the trade by Lindy Heaters, Inc., New York 57, N. Y., manufacturers of tankless water heaters. Central theme of the calendar is an illustration showing the proprietor of the bankrupt Joseph Q. Doakes Co. sitting on the curbstone in front of his shop. He moans, "I don't know what happened, I was always the lowest bidder too!"

Otto Lindy, president of the company, says that from requests for extra copies he has received it's evident that nobody recognizes himself as the curb sitter, but sees in it a good picture of his competitor.

Mr. Jobber... are you ready?

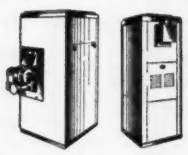
GET SET NOW

WITH THE WAYNE LINE



WAYNE OIL-FIRED DELUXE FURNACES AND BOILERS FOR ANY SIZE HOME.

FAMOUS WAYNE OIL BURNERS IN ALL SIZES.



POPULAR SMALL HOME WAYNE "HI-BOY" OIL-FIRED WINTER CONDITIONERS.

JOBBER *Franchises* AVAILABLE

GET WAYNE NOW

Act NOW to strengthen your supply and sales position. Consider the continuous demand for Wayne home equipment. Get set now—with Wayne—for more sales this year and in future years.

Wayne advertising and public acceptance help you sell. Millions of magazine ads, newspaper service, store display material, literature and sales helps are designed for you to cash in on. That's why Wayne Dealers get MORE sales and profits. You, too, can have and feature WAYNE, the complete line.

- Write For Exclusive Oil-Jobber Franchise Details
- Several Select Territories Available

WAYNE HOME EQUIPMENT CO., INC.

800 GLASGOW AVE. FORT WAYNE 4, IND.

L. O. Koven & Bro. holds Annual sales Conference

THE ANNUAL SALES CONFERENCE of L. O. Koven & Brother, Inc. was held recently at the company's main office in Jersey City, N. J. A complete review of 1950 business was made and plans formulated for an active campaign during 1951.

All local and out-of-town sales representatives participated in the program, which included a visit to New York's Latin Quarter the first evening and a closing banquet at the Plaza Hotel.

WM. STEINEN MFG. CO., Newark 5, N. J., has prepared a folder on its oil-burner nozzles and accessories. It includes illustrations of the nozzle in cut-a-way, in hollow and solid spray types and shows three nozzle kits that are available. Inspection mirrors, nozzle adapters and strainers also are pictured and described.

SCULLY SIGNAL CO., Cambridge 41, Mass., offers a 6-page folder describing the use of VENTALARM fill signals to stop overflow spillage during diesel fueling. Cut-a-way views of both standard and remote type signals are accompanied by drawings showing installation methods.

❖

Leslie R. Taylor, 60, president, International Heater Co., Utica, N. Y., died on January 27 following a heart attack. He was born March 22, 1890 in Kansas City and had been with International Heater for 38 years. His first 23 years were spent in sales work out of the Chicago office and in 1928 he went to Utica as vice president in charge of sales. For the past 4 years he has been president. In 1938 and 1939 he was president of the National Warm Air Heating and Air Conditioning Association, of which he had been a director for several years and also served as a director of the Institute of Boiler & Radiator Manufacturers. During World War II, Mr. Taylor was consultant to the WPB warm air furnace sub-committee in the Plumbing and Heating Division. In addition he had distinguished himself as an outstanding civic leader.

SUBSTANTIAL PROFITS *for* **YOU—**

Cleaning Furnaces with the **GRAND RAPIDS** *De Luxe* **FURNACE CLEANER**

You can put furnace cleaning on a money making basis by using a Grand Rapids Furnace Cleaner. High velocity suction scoops up all deposits of soot, ashes and carbon, cleaning the heating plant and re-establishing full efficiency. Special attachments clean flues, radiators, right angle turns and other hard-to-reach areas. The job is done quickly and completely. Customers are highly satisfied.

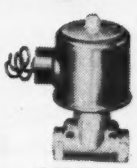
The Grand Rapids DeLuxe Furnace Cleaner is also your "in" for more than cleaning profits. By checking over and inspecting the heating plant as you clean it you are in a position to make timely recommendations for new equipment or repairs. This means better service for customers . . . more profits for you.

Write for complete information and prices today.

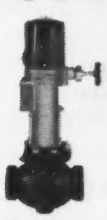
DOYLE VACUUM CLEANER CO.

233 Stevens St., S.W. Grand Rapids 7, Mich.

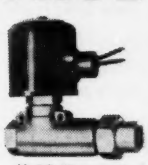
1st choice for AUTOMATIC CONTROL



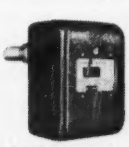
K-21 Magnetic Single Seated Valve



V-110-1 Manual Reset Valve

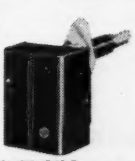


K-10 Magnetic Lever Valve



L-32 Immersion Thermostat

T-70 Room Thermostat



R-99 Oil Burner Stack Control

GENERAL CONTROLS

801 ALLEN AVENUE GLENDALE 1, CALIFORNIA

Manufacturers of Automatic Pressure, Temperature, Level and Flow Controls

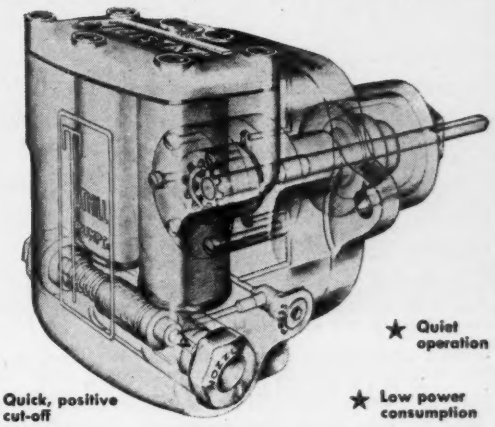
FACTORY BRANCHES: Baltimore 5, Birmingham 3, Boston 16, Buffalo 3, Chicago 5, Cincinnati 2, Cleveland 15, Dallas 2, Denver 4, Detroit 21, Glendale 1, Houston 6, Indianapolis 5, Kansas City 2, Minneapolis 2, Newark 6, New York 17, Philadelphia 23, Pittsburgh 22, St. Louis 3, San Francisco 7, Seattle 1, Tulsa 6, Washington 6.

DISTRIBUTORS IN PRINCIPAL CITIES

INSIDE STORY OF PROVED PERFORMANCE

★ Strainer removable without spilling

★ Cast iron pump unit encased in 45,000 p.s.i. tensile strength zinc alloy



★ Quiet operation

★ Quick, positive cut-off

★ Low power consumption

★ Light weight

TUTHILL 30E6N FUELSTAT

Provides
- UNIVERSAL APPLICATION
- DEPENDABLE PERFORMANCE
- SIMPLIFIED SERVICING
- GREATER ECONOMY
- MORE ATTRACTIVE APPEARANCE

Proved by thousands already in service, this perfected Tuthill Fuelstat sets the pace for dependable pumping equipment. All working parts are made of cast iron and steel with high grade (99.99+% pure) zinc alloy body to obtain the ultimate in toughness, durability, corrosion resistance and leak-free performance.

It will pay you to write for full details today

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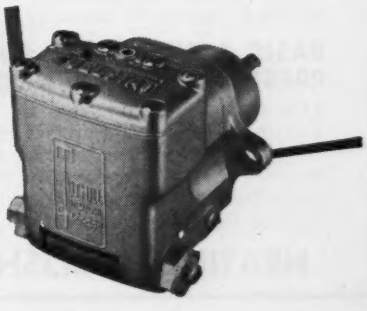


Reader's Problems

Q. I would like to know if you have any information on a pot type water heater that is connected to the same fuel line as a high pressure gun type burner. It seems that the hot water pot type burner continuously goes out while on pilot. This condition seems to happen when the gun burner starts.

If you can help me out on this problem I would appreciate it very much.
S. F. O. B., Eddington, Pa.

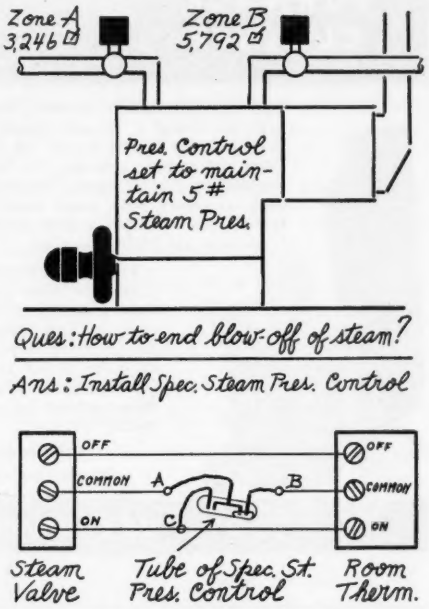
A. We gather that the pressure burner is given oil by gravity from an inside 275-gallon tank, and that the same tank feeds oil to the pot type water heater, which has a constant level device. If the equipment is connected this way, chances are slim that the flow of fueloil to the pot of the water heater could be interrupted even momentarily by the starting of the pressure burner, considering the amount of oil stored in the float chamber of the constant level device. Very likely, however, the two burners connect to the same chimney flue, as we visualize the installation, and when the pressure burner starts an upset in the draft on the pot type burner puts out its pilot. You can check on this easily by connecting the vaporizing burner temporarily to a separate small oil tank or drum, to give it oil supplied independently, and finding out if there still is trouble with its pilot going out.

* * *

Q. How to end the blow-off of steam from the 75 hp boiler in my sketch? The burner keeps up five pounds steam pressure.

Cold mornings, both zones take heat three or four hours and burner runs steadily. Every so often, Zones A and B shut off together. Burner stops, but heat from the red-hot firebox boosts pressure to more than 15 lbs. and the pop valve on the boiler opens, wasting oil and filling the boiler room with steam.

One suggestion is pipe the blow-off steam (from pop valve) to the load side of one zone valve. Your ideas and



NEW OILHEATING BOOKS

Money Saving Books That Instantly guide you and enable you to solve many of the problems you face on almost every job.
Easy to follow instructions — Simple everyday language — Expert information — Pictures — Diagrams — Charts, etc.
You'll be delighted with the helpful money saving ideas—that will actually save you hundreds, yes, even thousands of dollars each year.

THE SELLING MAN
Specialty salesmanship in our day with emphasis on burner selling by W. A. Matheson, of Eureka Williams Corp., long a leading figure in oilheating industry. Blue cloth binding, 6 by 9 inches, 260 pages. ..... **$5.**

LOW PRESSURE BURNERS
Only book other than manufacturers' manuals that gives a full picture of low pressure burner principles of operation and construction — Winkler, Oil-O-Matic, G. E., Hart, Hev-E-Oil. Skeletonized diagram of each make of burner makes them more understandable. The new booklet is 8½ by 11 inches, 20 pages. .. **$1.**

BASIC SERVICE TEXT FOR PRESSURE TYPE BURNERS
This manual was prepared by G. T. Kaufman, technical secretary of the Oil Heat Institute of America, and is intended for basic training of installers and service men in residential oilheating. It is also a useful reference source for those who have completed the training courses. A good, elementary book. Contains quiz questions to brush up with. 216 pages. Paper covers. ..... **$2.**

BEACON BOILER BOOK
Only complete, comprehensive boiler book. New and revised edition. Embraces ratings and specifications of every boiler built in U. S. Up to 2,000 sq. ft. of steam radiation. Handy size, 8 by 11 inches. .. **$3.**

OIL HEATING HANDBOOK
Revision of famous text by Han A. Kunitz giving complete data on all phases of oilheating. An indispensable guide to sellers and installers of equipment. Many illustrations, charts, diagrams and graphs. Lists types of service troubles and includes estimating tables. 456 pages. **$5.**

INSTALLING THE DOMESTIC OILBURNER
This is the first practical guide on oilburner installation. It contains the most significant articles from FUELOIL & OIL HEAT that cover all phases of installation step by step. It is 8½ by 11 inches and contains 64 pages. Illustrated with numerous diagrams, charts and photos. .. **$1.**

HEADING OFF TROUBLE
This book contains articles about the most important precautions to take in installations and service and thereby cut down the number of service calls. The selection is about those things which give the greatest amount of future trouble for service men. A highly practical compilation of pieces from FUELOIL & OIL HEAT. It's a 64-page book 8½ x 11 inches. **$1.**

VAPORIZING BURNER SERVICE
A compilation of articles from FUELOIL & OIL HEAT by a veteran service manager and an oilheating engineer. Gives important wrinkles and angles of servicing pot-type units. 32 pages, 8½ x 11 inches. Many diagrams. ..... **$1.**

HEATING PUBLISHERS, INC. • **232 Madison Avenue, New York 16, N. Y.**

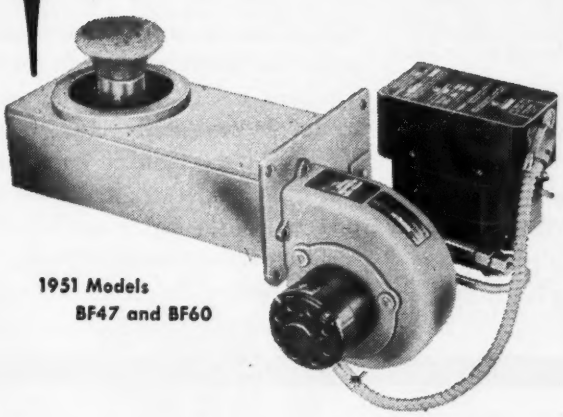
MORE FURNACE MANUFACTURERS THAN EVER BEFORE WILL CHOOSE

KRESNO-STAMM
Since 1927

The New 1951 *Ball Flame*

Reg. U.S. Patent Office

OIL BURNER



1951 Models
BF47 and BF60

In 1951 manufacturers will again show their overwhelming confidence in the quality and performance of "Ball Flame" Burners by making them a vital part of the furnaces they will ship to small homes projects and to builders of hundreds of individual homes.

This *completely automatic, pressurized air, gravity type oil burner* is now standard for leading makes of small furnaces, installed in many flourishing home developments.

Builders and heating contractors in large numbers are writing the "Ball Flame" into their furnace specifications.

Here's Why

- ✓ **It's absolutely quiet—no motor hum, no flame roar.**
- ✓ **It burns less than 0.75 gallon per hour *without clogging*, flame deflection and burning out of fire boxes, as with small capacity pressure burners.**
- ✓ **It vaporizes and burns the oil perfectly — no starving the center of burner flame and poor combustion.**
- ✓ **An automatic levelling device is built into each burner.**

KRESNO-STAMM MFG. CO. (America) Inc.
PALISADES PARK, N. J.
Canadian Affiliate: Kresno-Stamm Mfg. Co. (Canada) Ltd.
1452 Drummond Street • Montreal, P. Q.

Keep Your Service Crew *Busy the Year Round*

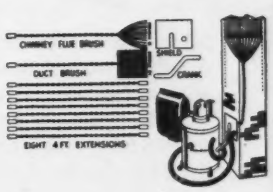
Most fuel companies and heating equipment people recognize the importance of Furnace Cleaning as a profitable business. Many service companies occupied almost entirely in the servicing and repair of heating plants find a field of greater profit in adding furnace cleaning to their services.

In summer, the normal off-season period, furnace cleaning keeps your service crews profitably busy.

General Electric Furnace Cleaners are compact, easy-to-handle and built for extra-heavy duty. They convert quickly to powerful blower action for loosening soot and grime in stubborn corners. Easy mobility makes a hit with cleaning crews. You get more work jobs and can keep busy the year round.

G-E Chimney Cleaning and Air Duct Equipment

Makes job go faster. Prevents soot from escaping into cellars. Revolving handle and vacuum hose fit through special shield that scoops up falling soot. Set includes Shield, Crank, Chimney Flue Brush, Duct Brush and 32 feet of extensions.



Mail coupon for details.

Furnace and Boiler Cleaners

GENERAL ELECTRIC

GENERAL ELECTRIC COMPANY, Dept. 22-1629
1285 Boston Ave., Bridgeport 2, Conn.

Without obligation, please send complete details on heavy-duty cleaning equipment.

NAME.....

FIRM.....

ADDRESS.....

CITY..... STATE.....

comments on this trouble will be greatly appreciated.

F. W. U., Grosse Point, Mich.

A. Do not use the boiler's regular pressure-relief valve in the way you describe, as this would detract from the valve's ability to protect the boiler during an emergency involving excessive steam pressure. You could safely install another pressure-relief valve, 3" size and set to open at 10 or 12 lbs. boiler pressure, and having a threaded outlet connected to Zone A or B in the way you describe.

A much less costly remedy is to install a special steam pressure control set for about 10 lbs. pressure. This would have a three-wire, Series 20 mercury switch. With the boiler pressure lower than 10 lbs., the switch is in the position we show it. Terminal "A" connects to terminal "B," and the room thermostat controls the steam valve. When the pressure exceeds 10 lbs., the mercury switch snaps to its other position, the mercury rolls to the left, and terminal "A" connects to terminal "C" instead of to terminal "B." This opens the zone steam valve for a few minutes, lowering the pressure. You can install this inexpensive arrangement in an hour, and it will end the trouble. It will not waste steam.

* * *

Q. Complete revamping of the water heating equipment is ordered by our customer who recently moved into a large house about 25 years old, and your help is requested.

Data: House regularly occupied by seven adults, may have two weekend guests; two baths; one fulltime and one parttime servant; automatic dishwasher and clothes washing machine; all laundry done in house.

Playing safe, I said we'd install a large hot water tank and indirect heater. I want help on figuring sizes of these. Piping details will be appreciated. This is to be a deluxe, foolproof job in every way.

E. E. D., Minneapolis, Minn.

A. Judgment counts in selecting the size of the tank, and reasonableness of the users of hot water is a factor, because even a 150-gallon tank would go cold if within a three-hour period every occupant took a steaming-hot bath and the dishwasher and washing machine were used for large loads.

Consider an 80-gallon hot water tank as the minimum size that might possibly meet the requirements. If you install this size tank, use an indirect water heater that will provide between 120 and 150 gallons of hot water, 100° rise basis, in three hours with the boiler temperature at 180°. Play safer if the owner can afford this, installing a 120-gallon tank and an indirect heater for 180 to 225 gallons in three hours on the basis outlined above.

The accompanying diagram shows a good, standard layout. Use the pipe sizes recommended by the manufacturer of the indirect heater. The tee above the tank is connected to the tank by a nipple one pipe size larger than the circulating lines that connect the coil of the indirect heater to the tank. The tank is high as possible; the bottom of the tank really should be above the top of the indirect water heater. The top of the water heater should be higher than the top of the boiler. Use highly effective insulation on the tank. Set the boiler temperature control at

Sell 90% of the Home Heating Market with ALDRICH CONVERTIBLE HEAT-PAK BOILER-BURNERS

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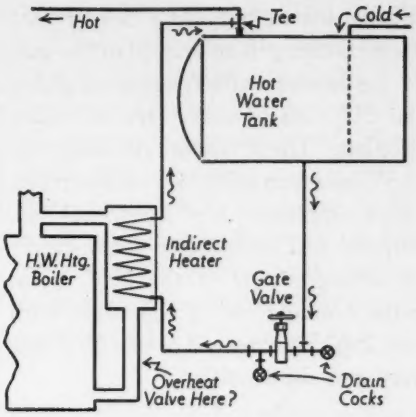


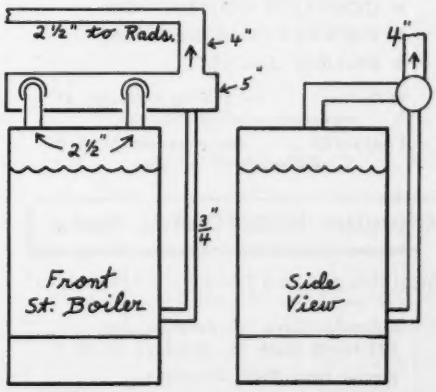
200°, and use controls that permit the heating boiler to chill in summer when a tank temperature control, located halfway up the side of the tank, indicates the tank temperature is above 130° or 140°. If high boiler temperatures are needed during the heating season for house heating, install a valve under the water heater to permit avoiding tank overheating. Provide a deluxe job of this kind with a mixing or tempering valve. Don't fail to install on the hot water tank a safety relief valve of features, design, and capacity to meet the requirements of the most high-minded safety experts!

* * *

Q. Will this dripped header end pounding in pipes caused by slugs of water? Another trouble is smashing of innards of steam main quick vents. The header will be costly, therefore my friend says not to install it but to try everything else first. The boiler is fired hard for its size, and a 2½" steam main connects it to its heavy load of one-pipe steam radiation. Do you recommend this header?

J. F. S., Wilmington, Del.

A. You should try everything else first, in the way suggested by your



2½" line now runs from one boiler st. outlet-other 2½" st. outlet of boiler is plugged

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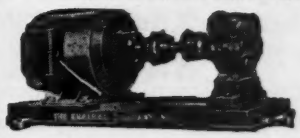

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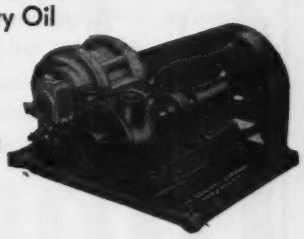

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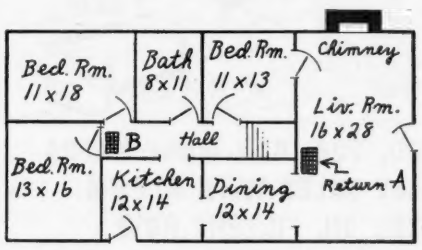
friend, particularly checking to make certain that boiler water treatment will not end the trouble. The boiler should have clean, free-steaming water in any event, whether or not you install the header shown in your drawing.

Probably the trouble is directly caused by (a) overloading and overfiring of the boiler, and (b) the use of only one 2½" steam outlet of the boiler for a heavy load, and plugging of the other 2½" steam outlet.

Your header design may be needlessly costly, though it shows you are determined to provide a header that leaves nothing to be desired in the way of the header's effectiveness in giving the 2½" main steam free of water droplets. Think about running two 2½" lines vertically out of the boiler into a simpler 3" or 4" horizontal line, dripped and arranged to form simply an enlarged part of the 2½" steam main. Coming out of the boiler with two 2½" lines instead of one 2½" line may end the trouble.

* * *

Q. I hope you can back me up in my argument that two, not one, return registers should be used in this rather expensive ranch-type bungalow now being planned. Another man says return register "A" is all that's needed for the forced-furnace system, objecting to the register I insist on at "B" besides. He says "B" is poor practice in that it's close to where kitchen and bath odors will draw into it. I say this 130,000 Btu furnace needs two returns



in this long, rambling one-story house, and where will you put the second register if not at "B" in the back hall?
G. L. B., Syracuse, N. Y.

A. With the furnace located near the chimney shown in your sketch, the other man undoubtedly wants to economize on the cost of the heating job by locating only one return register at "A," where it is close to the furnace.

A good-sized return register at "B" in addition certainly is a big improvement; in fact, to the minds of many heating engineers is a necessity.

It is inferred that the premise for proper heating of the two end bedrooms is that their doors will be open most the time, or will when closed have air spaces at the bottoms of an inch or so, for leakage and returning of air. Still working on that premise, you may want to suggest to your friend two additional return registers, one in the 11x18 bedroom and the other in the 13x16 bedroom. Used instead of the return at "B," these two return registers may prove still more effective, and may at the same time overcome his objectives to the registers at location "B." One expert, who is still smarting from having been stung by a return-air problem, declares that if you want to make certain of not getting stung on this job you should think about two, not one, return registers in the living room, as insurance against cold-floor drafts in such a large living room. He insists that you should plan also for

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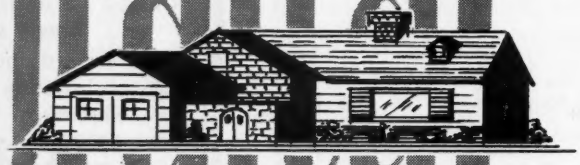

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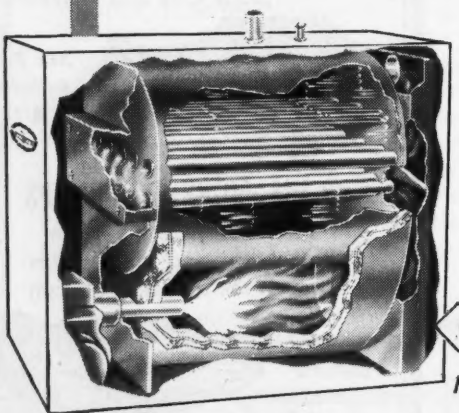

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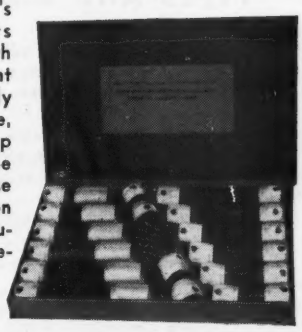

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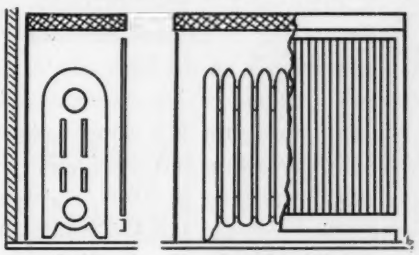
a return register in each of the two end bedrooms, and an additional return in the hall right outside the 11x13 bedroom. This expert, then, votes for five returns in a house like this. He declares that providing a minimum of three returns is so expensive in duct work that runs the length of the basement that the additional two returns he wants will cost little extra, perhaps only $20 extra as he sees it.

* * *

Q. Old-style hot-water radiators have been fitted with the cabinets I show you here, which are expensive and goodlooking. The owner won't throw out the cabinets, and this creates a problem as I try to modernize the heating plant. The cabinets enclose the radiators completely in back, at the two ends, and on top (tops of cabinets are, in fact, efficiently insulated with cork to keep them cool) and the fronts are slatted in a way that gives only 50% air opening.

Radiator Cabinet Problem



Question One: Don't these cabinets cut by 30% to 50% the heat-output of the radiators, so give oversize oil bills where a living room had proper size radiators to start out, and with the thermostat in this living room?

Question Two: Will I eliminate the penalty of these cabinets by putting in them modern tube-type radiation that fills them completely, taking out the old column-type radiators that now take up only about 60% of the space available in the cabinets for radiation?

B. F. C., Jr., Bethlehem, Pa.

A. First, you may be correct about the 30% to 50%, although because of the effect of other first-floor radiators and other factors, such a reduction in radiator heat output might be raising the fuel bills only about 10%. In some other cases of this kind, it worked out that all the radiators were about 50% oversize to start out, and jacketing

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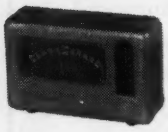

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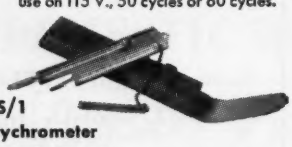

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them produced steadier heating, raised the fuel bills slightly but not an important amount, and did not prevent proper heating during coldest weather. Take off the jackets for one month during the winter if you can, and study the effect on the fuel consumption and the heating of all the rooms in the house. Used to the effects of the jackets, the owner might say that without them the living room heats as it did, but the other rooms in the house are underheated.

Second, filling the radiator cabinets with new radiation is a gamble, for it will result in less circulation of air through them than there is now. We say, don't try that.

* * *

Q. Will a hot water heating boiler fired 2.50 gph be overloaded by adding a tank-type water heater and a 80 or 120-gallon hot water tank to its present load, which now is carried easily with the stack rather cool? Figure nine house occupants using hot water.

E. E. D., Minneapolis, Minn.

A. Figuring that each of the nine occupants uses 15 gallons of hot water a day, which is on the high side, calls for 135 gallons of hot water in 24 hours. Figuring the hot water weighs 8.18 lbs. per gallon and is heated over a temperature rise of 100°, the hot water load comes to 110,430 Btu in 24 hours (obtained by multiplying the 135 gallons by 818, which is the number of Btu's needed to heat one gallon 100°, say from 50° to 150°).

As the tank-type water heater spreads this load over many hours, consider that water is being heated steadily by the boiler each hour for 16 hours of the 24-hour day; eight hours of the day the tank is considered fully heated, then, and drawing no heat from the boiler. This spread of the load causes dividing the 110,430 Btu 24-hour water heating load by 16, and obtaining 6,277 Btu per hour as the additional load usually put on the boiler, 16 hours a day, by the water heater. As one gph of firing rate provides a boiler output of 100,000 Btu per hour, in round numbers and considering the overall efficiency of the boiler and burner as 70%, the additional load of 6,277 Btu per hour can be carried by firing the boiler .06 gph (six hundredths of a gallon-per-hour) harder

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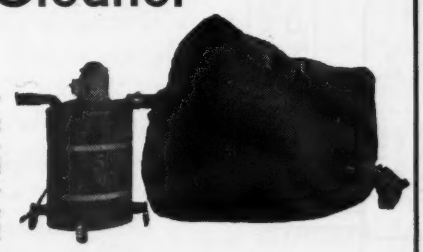

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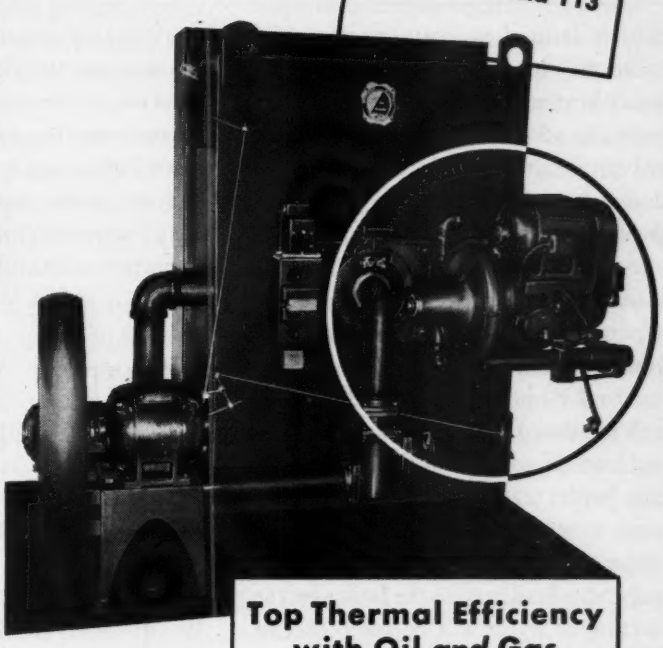

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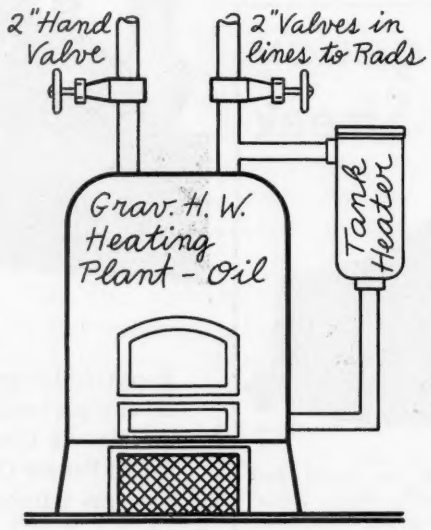
than it is fired without carrying the additional load of the new indirect water heater. Even considering that at times the added load is three times this heavy, because much hot water is drawn for an hour or two, makes the needed increase in gph rate less than one-fifth of a gph. Consider the added load, put on the boiler by the tank-type water heater, as negligible. Or if you want to split hairs, fire the boiler harder by one-tenth or one-fifth of a gph to allow for the added water heating load. If you install the reverse-acting boiler temperature control often used to stop the circulator when the boiler tends to chill below about 160°, any extra load put on the boiler by the heating of water will be taken care of automatically. When the boiler must heat large amounts of water for a short time, it will automatically drop its heating load for that time. On that basis, probably no increase in gph rate, to allow for water heating, need be considered.

* * *

Q. A man who bought a house for which I've supplied oil for years came to me with this question. How do you get heat and hot water from the layout shown in this diagram, which includes an oil-fired gravity hot water heating plant, an indirect water heater connected to a tank, and two hand-operated gate valves in the two mains to the radiators? The old owner, in selling the house, said it provided heat and hot water by the oilburner. He's moved far away now. Questioned by mail, he said the new owner should get directions from me, as I provided the oil for years. I never saw the plant before, in fact never before saw a layout like this one, and am on the spot in trying to hold the oil account by giving the new owner proper instructions.

M. B. W., Providence, R. I.



A. This layout is not entirely unknown, but it is likely to be entirely unsatisfactory to the new owner, as can be judged from these instructions which you may give him.

To obtain heat in the house: Open wide the two 2" hand valves in your diagram, and use the room thermostat in the usual manner to control the heat in the house.

To obtain hot water: Heat the hot water tank by (a) closing tight the two hand valves and (b) raising the setting of the room thermostat all the way, so the burner runs until started and stopped by its high limit control, located on the boiler and set perhaps at 180° or 200°.

When heat is being obtained during mildly cold weather, the boiler temperature may run between 90° and 140°, and the hot water tank will be heated slightly. The tank will not be heated sufficiently to provide satisfactorily heated water. You might say that at such times the chill will be taken from the tank, almost as if unintentionally, by accident.

During the coldest days of the heating season, the boiler temperature may run between 130° and 180° (if the owner is lucky it will run high) and the plant may provide both heat and hot water.

On most days of the heating season, when outside temperatures run between about 20° and 45°, this system cannot provide satisfactory heat and hot water without the owner's going down to the basement and closing the two valves when he wants the tank heated properly, and opening the valves when he wants the house heated.

The layout does not provide heat and hot water automatically. Consider improving it by adding to it a circulator, and replacing the two hand-operated valves with flow control valves. At present, the system simply is not complete.

Q. My problem is to heat the building shown in the accompanying blueprints . . . as economically as possible, and without using floor space, thus eliminating a boiler or furnace room.

It has been suggested by the customer that the suspended units could do the trick.

I would like to know how many units would be required and what the arrangements would be for getting oil to the separate units.

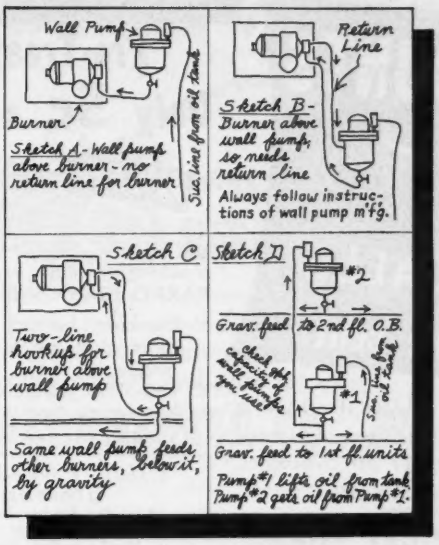
Is there a more practical method? Cheaper?

D. N., Gloucester City, N. J.

A. Figuring the heat losses of the building for you is, of course, beyond the scope of the assistance given readers by this department. You'll have to figure the heat losses of the different rooms, employing dimensional data on windows and doors not in the blueprints, and using details on desired inside temperatures, and construction of walls, ceilings, etc.

By making quick guesses, which may be entirely wrong because we do not have such data as are mentioned above, we would estimate that (a) Each of the downstairs rooms that measures 14′ x 74′ might need two units, each of about 100,000 Btu output; (b) The center downstairs room, 38′ x 74′, might need two units, each of about 100,000 or 130,000 Btu output; (c) The upstairs room might need two units, each of about 150,000 or 200,000 Btu output.

These guesses are based on the large


Wall Pump
Burner
Sketch A- Wall pump above burner - no return line for burner
Suc. line from oil tank
Return Line
Sketch B- Burner above wall pump, so needs return line
Always follow instructions of wall pump m'fg.
Sketch C
Two-line hookup for burner above wall pump
Same wall pump feeds other burners, below it, by gravity
Sketch D
#2
Grav. feed
to 2nd fl. O.B.
#1
Grav. feed to 1st fl. units
Pump #1 lifts oil from tank
Pump #2 gets oil from Pump #1.

cold ceiling areas being uninsulated, and on being able to heat the building to 70° on coldest days. If these premises are wrong, the heating possibly can be done well using half the equipment capacity indicated.

If you install suspended units, it appears wise in any event to install one unit at each end of each room, as each room needs two units because of its 75 ft. length.

Regarding feeding oil to the units, we suggest that two-stage fuel units be used on the pressure oilburners firing the suspended units, to gain the great oil-lift ability of such fuel units.

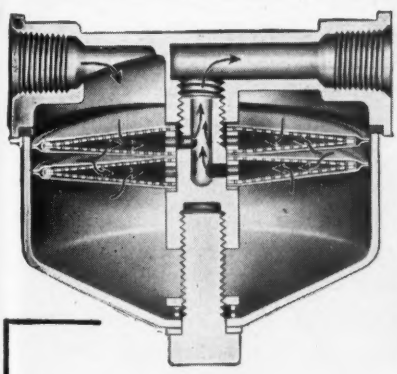
Many authorities on oilburner pumps and fuel units believe that the lift from the bottom of an oil tank to a burner should not be greater than 10 feet; on this basis, you would have to use auxiliary equipment to get the oil to the units on the first floor. Our attached sketches "A" and "B" give ideas for this.

On the other hand, on some jobs two-stage fuel units are lifting oil up to 15 ft. successfully, and here you may want to arrange for the first-floor burners to draw oil directly from the oil tank, though this gives a lift of just about 15 ft. Discuss this with the manufacturers of the fuel unit and the oilburner before you make your decision.

Feed oil to the burners on the second floor by using wall pumps, as shown in our sketches "C" and "D."

You will have to decide whether it costs less to use simple piping and several wall pumps, perhaps one for every suspended unit or one for the two second-floor units, or whether it costs you less to use one high-capacity wall pump together with oil piping more farflung and complicated, as shown in diagram "D." You can figure the maximum lift for a wall pump as 20 to 23 ft., measuring from the bottom of the oil storage tank to the pump.

Each suspended unit must have a stack or smokepipe arrangement acceptable to the local authorities and insurance interests that will be concerned with the safety aspects of the entire installation. You may do well to have this detail, and the oil piping and Btu figuring done by a heating engineer experienced in such work and able to assure you that his planning is being done properly.



CLEAN FUEL OIL THE SPARKLER WAY

. . . means less burner trouble

. . . fewer call-backs for you

Boost your profits, keep your customers happy, and save needless work for yourself by installing a Sparkler Fuel Oil Filter on every oil burner you service.

The Sparkler Model OB is a *positive* filter because oil cannot by-pass the filtering element. When oil reaches the burner nozzle, you know that all sediment (even micro-size particles) and water have been removed. The burner works more efficiently and your customers need not worry about emergency calls.

And whenever you service a Sparkler-equipped burner, don't take chances by leaving the old discs in the unit. Install a new cartridge. It takes less than a minute, gives you a profit-making sale and protects your customer.

There's a size for every installation

Write for complete details

SPARKLER horizontal plate FILTERS

SPARKLER MANUFACTURING CO., Mundelein, Illinois

Manufacturers of precision filtration equipment for more than a quarter of a century.

ADD *New* ACCOUNTS *Quickly*—
CUT SERVICE CALLS
for 5/1,000th of one cent!

PARKO SLUDGE-BAN is now being used by many of the major oil companies.

Inquiries Invited for Distributorships in Protected Territories

PARKE-HILL CHEMICAL CORP.
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MT. VERNON 8-8312

Pre-Treat Your Fueloil for Only 5c a THOUSAND Gallons!

WHEN PARKO SLUDGE-BAN CONCENTRATE

is added to your fuel oil, you will attract many new accounts and build good will with your present customers through the *trouble-free* and *better* oil heat made possible because PARKO SLUDGE-BAN CONCENTRATE:

- √ Prevents bottom sludge from clogging filter and nozzle.
- √ Dissolves sludge in tanks by fast, positive chemical action.
- √ Minimizes sooting, carbonizing, smoking and disagreeable fuel oil odors.
- √ Eliminates condensation and prevents rust.

Other Parke-Hill quality chemical products:

SLUDGE-BAN
Fuel Oil Sludge Remover
OXI-BAN
Liquid Boiler Cleaner
SOOT-BAN
Fast-Acting Soot Remover
SCALE-BAN
Liquid Boiler Cleaner for hard water areas
BOILER-SEALER
GREAS-BAN
Service Kit strainer and nozzle cleaner
DRI-SCALE-BAN
Oil Absorbant & Suspendant for steam boilers
BANSOIL
The "Oil Blotter"

Readers' Forum

NORTHERN CONTROLLED HEAT CO.
Watertown, N. Y.

Editor:

I am enclosing 12 invoices from John Jones, Inc., and a letter from them showing additional cost of service on a (Big Name) oilburner that Jones installed on April 28, 1945. Mrs. Arthur Rogers, the owner of the burner and a new cast iron hot water boiler with a forced system, called the writer in desperation, stating that she just could not afford to continue to pay for the service on an oilburner only five years old. Mrs. Rogers stated that she had had three new relays in the five years.

Here is a summary from the bills sent you:

1945

Out of oil	$ 2.30
Burner fuse blown	3.53
Total	$ 5.83

1946

Install oil gauge, Service Burner, Clean boiler	$ 27.16

1947

Clean boiler and burner	$ 18.55

1948

Service oilburner, Repairs on relay	$ 42.75
Clean burner and boiler	4.75
Total	$ 47.50

1949

Service oilburner	$ 7.90
Service oilburner, Clean boiler, Repair Combustion chamber	27.29
Install new chamber	38.97
Check thermostat, controls	3.25
Total	$ 77.41

1950

Check heating system	$ 3.25
Labor on thermostat, Helix Spring for element	13.00
Total	$ 16.25
Grand Total	$192.70

This is one of the examples of what the public is going through, especially when having oilburner service by some plumbing and heating concerns who do not sell fueloil.

As you probably know, there is a racket when it comes to the replacement of fueloil pumps. Many, many times when the strainers and filters are plugged, or when there is air in the pump, causing a line, pumps are ripped off and a new one installed. It would be very interesting to know just how great the pump replacement business is, compared to the number of burners in use. Many unscrupulous dealers charge $40 to $50 for a fuel pump alone, and the trade wonders why many people go to natural gas when it enters a community.

I feel that the major oil companies (who have received the cream from the burner business) and other interested companies; such as, controls, pumps, nozzles, and other allied manufacturers of burner parts, should get together in an advertising campaign, informing the public that they should purchase their oilheating equipment through reputable firms who have standard established prices (incidentally, John Jones, Inc., charges $43.20 for a relay, and you know the usual price is the price set by the manufacturers—$36 retail.) I wonder what the manufacturer would think of the cost of the oilburner service on this 5-year-old oilburner?

I know there is a movement on foot and an organization set up for a plan similar to the above, and I noticed in the last write-up that, as usual, the small dealer was to kick in, who in my opinion, never will.

I also feel that if the oilburner industry is going to successfully combat gas competition, they must "clean house" and try to eliminate these abuses.

Maybe you can give me the answer to why about 1/3 or more of the people who are purchasing oilburners at retail purchase them through unknown, part-time dealers, and in our city, even from city firemen, who work every other day in the heating business.

Don't you think a lot of the above cause a terrific discussion at some of your convention meetings? I would be very glad to have your comments.

F. W. AIKEN, *President*

EDIT. NOTE—*The names of the customer and her service organization have been changed for obvious reasons.*

REMEMBER THE ADVANTAGES OF . . .

• COMPLETE STOCKS
• GUARANTEED QUALITY
• FAST SERVICE

★QUALITY BERCOR SERVICE★

"BERCOR"
Authorized AUTOMATIC HEATING PARTS
REBUILDING & EXCHANGE SERVICE

The "Bercor" Advantages provide a dependable *one stop* center for all your parts servicing needs. "Bercor" offers the completest coverage in the Midwest of nationally known manufacturers' parts and equipment. Write for our new parts catalog and price list today.

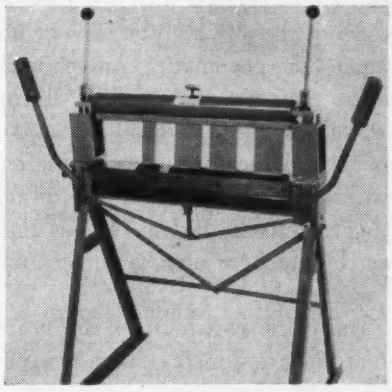
G. W. BERKHEIMER CO., INC. 1040 WASHINGTON ST., GARY, IND. 437 S. ILLINOIS ST., INDIANAPOLIS, IND.

New Products

Sheet is always level In Webco box Brake

DESIGN of the Webco box brake is such that when forming a sheet metal box the sheet remains level in the machine at all times and there is no need to support the box with one hand and carry it up as a side is bent. The sheet does not have to be taken out of the machine as each successive bend is made and interchangeable fingers on the box assembly permit making boxes 48" wide, with a maximum depth of 6" on both 30" and 48" brakes. The length of the box to be formed is not limited by the length of the brake. Any length may be made by having the two long sides formed on a longer standard brake.

A slip end feature incorporated in Webco brakes permits swinging the clamping bar assembly clear of the machine by pushing in a spring lock on



the left hand side of the machine, turning the cam parallel with the clamping bar and swinging the clamping bar assembly back. When the assembly is returned to the work position and the cam turned perpendicular the spring lock automatically snaps back into place.

Made by: Webb Machine & Tool Co., 600 Washington Road, Pittsburgh 28, Pa.

Quiet Automatic furnace Is portable, oilfired Unit

ADDITION of a portable, oilfired warm air furnace has been made to the Quiet Automatic line. The high pressure atomizing oilburner firing the unit incorporates a "Catomic" adjustable turbulator in the burner nozzle. Units are offered in several sizes, all burning No. 2 oil and are shipped with stainless steel combustion chambers. A hook on top is provided for lifting the complete unit from floor to floor.

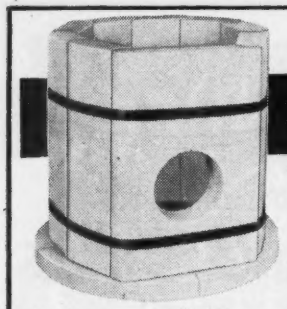
Especially designed for heating large spaces for temporary heat in new constructions or for drying paint or plastering, the furnaces can be wheeled from space to space or can be used permanently in one location. To operate it is necessary only to plug in the elec-

ONLY McCORKLE CONTROLS
for Vaporizing Oil Burners
give you this combination of vital features

- Patented dual blade bi-metal assembly—insures trouble-free operation—supplies a wide margin of *extra* power.
- More rapid heat transmission.
- Snap acting Micro-switch.
- Heavier, more rugged construction.
- Less service—greater customer satisfaction.

We will gladly furnish literature and specifications for your particular requirements. Write us today!

D. H. McCORKLE CO.
Box E, Station A Berkeley, California



FOR SATISFIED CUSTOMERS — INSTALL . . .

AMERICAN COMBUSTION CHAMBERS

100% "KILN-CURED" LIGHTWEIGHT REFRACTORIES

Equipment manufacturers are invited to bring their special design problems to us.

HIGH QUALITY

American Chambers are made from the finest, high grade refractory materials combined with proper "Kiln-curing". They will withstand 2500 degree temperatures and will not crumble in water.

EASY INSTALLATION

Controlled manufacturing and careful design of American Chambers makes for fast and easy installation. The flexible pieces fit together with a minimum of effort.

TOP PERFORMANCE

Because of the high quality of materials used in American Chambers they provide faster heat-ups, quieter burner operation and savings in fuel.

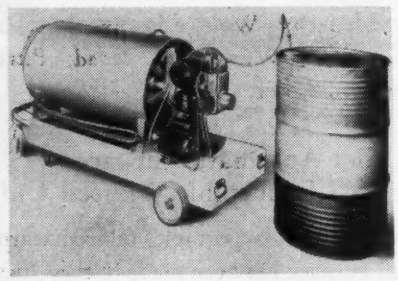
AMERICAN

JOBBERS: Write today for price sheet.

AMERICAN CLAY FORMING CO.

TIFFIN, OHIO

trical cord to a 110 volt line, attach feed line to an oil drum, hang up the thermostat and turn on the switch.



Models also can be furnished with built-in oil tanks.

Made by: Quiet Automatic Burner Corp., 33 Bloomfield Ave., Newark 4, N. J.

Red Devil soot remover In liquid or powder Form

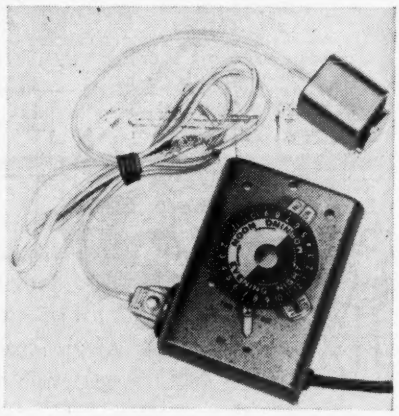
RED DEVIL soot remover, available in liquid or powder form, is intended to do a 5-way job. It helps remove soot, dissolves gum and sludge deposits, emulsifies water in the fuel tank, increases operating efficiency and cuts fuel costs. One pint of the liquid treats 150 gals. of fueloil, when the Red Devil is added to the contents of the tank. The powder is intended for use with coal or wood heating equipment.

Made by: Marine Electrolysis Eliminator Co., 617 Dearborn Ave., Seattle, Wash.

Robot clock Switch Lowers night Temperatures

THE ROBOT night temperature control, designed to be used with any make or model of room thermostat, low or line voltage or pneumatic, automatically lowers temperatures at night. It consists of two parts. A small heater unit hooks underneath the room thermostat, with a cord from the heater plugged into the Robot 24-hour clock switch, which, in turn, is plugged into a wall outlet.

The clock switch turns the heater on at night and increases the temperature at the thermostat, preventing it from starting the burner until the room temperatures have dropped to the desired night level. The clock control may be mounted on the baseboard, or wherever desired, and may be unplugged



at any time and used to turn radios, lights or appliances on and off.

Made by: Miller-Harris Instrument Co., 836 North 4th St., Milwaukee 3, Wis.

Bete Fog Nozzle adds Low gallonage Models

FINE AND UNIFORM fog droplets at low operating pressures are claimed for a new line of low gallonage nozzles offered by Bete Fog Nozzle, Inc., Greenfield, Mass. The new models employ the pin-jet impingement principle, have no internal parts and can-

8 WAYS BETTER

THERMO DRIP Automatic HUMIDIFIER

1 Water drops in pan after it is sizzling hot.
2 No stagnant pool to reheat.
3 Each drop of water vaporizes quickly as it hits pan.
4 1 kit to purchase.
5 12 pan sizes.
6 Super sensitive thermostat.
7 Outside screw adjuster.
8 Easy installation. FO-31

Vaporizing pans rest directly on combustion dome. Can be suspended in plenum chamber. Simplicity of construction insures long life—easy servicing. There is no electrolytic action—no clogging of valve. Write TODAY for FREE literature.

AUTOMATIC HUMIDIFIER CO., CEDAR FALLS, IOWA

A BURNING QUESTION FOR 1951...

What's Ahead in Fuel Oil Supply?

GET THE ANSWER AT THE 19th National OIL HEAT EXPOSITION and OHI CONVENTION

OHI

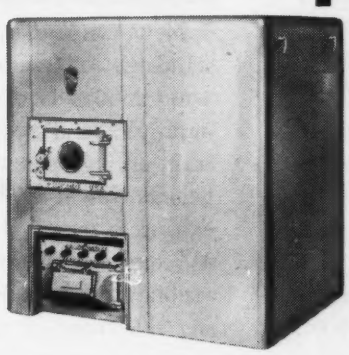
for full information contact OIL-HEAT INSTITUTE OF AMERICA, 6 East 39th Street, New York, New York Phone: Murray Hill 5-1638

Chicago, April 2-6, Navy Pier, Palmer House

HESS *when in Chicago— be sure to visit our display of the finest in warm air heating equipment*

132 NORTH CLINTON ST.

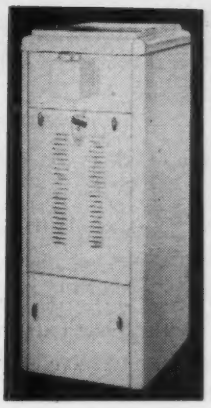
Just across the street from
Chicago & Northwestern



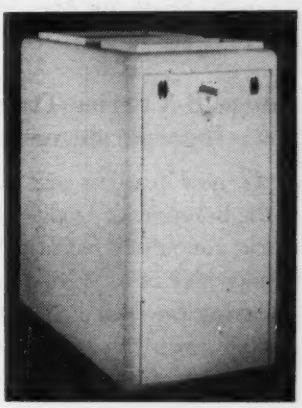
The Hess Company

Chicago 6, Ill.

OUR 78TH YEAR SINCE 1873



Hess Climate Master models available in wide range of capacities — for any fuel.



not clog with foreign particles smaller than the orifice size.

Ten orifice sizes are made, ranging from .015 to .080 ins. diam., flow rates from 1 to 100 gph. Available from stock in brass with stainless steel pins, or made to order in other metals. A new pin design is described as reducing interference with the fog pattern.

Made by: Bete Fog Nozzle, Inc., Greenfield, Mass.

"Elno" Anodic Rods for Large hot water Tanks

"ELNO" anodic rods for insertion in large hot water storage tanks are made in units 21" long and 3" in diameter. Each section has a center core of ½" iron pipe, which extends 1½" from each end, making it convenient to assemble units into various lengths. Connections are either factory made or assembled on the job. Standard assembled lengths are 45", 58½", 69", 82½", 93", 106½" and 117". Assembled units should be placed not more than 8" from the end of the tank.

"Elno" anodic rods, 1⅜" in diameter, also are made for 24" diameter tanks, are fitted with 1¼" brass pipe plugs. They are available in one piece in lengths of 42", 54" and 60". Also made for domestic use are rods ⅞" and 1" diameters, equipped with a special fitting that serves as a hot water outlet.

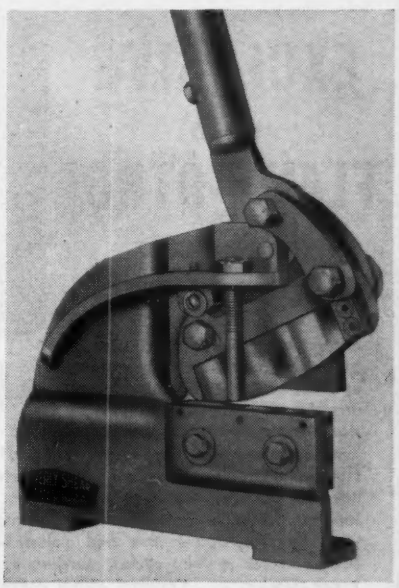
The rods do their work of rust preventing by electro-chemical action, preventing corrosion of the galvanized storage tank. Sectional connected rods can be furnished for addition to existing water heating systems.

Made by: Cleveland Heater Co., 2310 Superior Ave., Cleveland 14, Ohio.

Beverly slitting Shear Handles up to 14 Gauge

BEVERLY SS slitting shears are made in three sizes to handle 14 ga., 10 ga. and 3/16" mild steel. The models weigh 3½ lbs., 10½ lbs. and 25 lbs., employ blades 2¾", 3½" and 4½" long.

The shears incorporate advanced de-



sign features to provide maximum cutting capacity with minimum size and weight, with compounded linkage for easy cutting action. A rigid, braced frame holds upper and lower blades in

proper alignment. For cutting stainless steel high carbon, high chrome blades are available.

Made by: Beverly Shear Mfg. Co., 3004 West 111th St., Chicago 43, Ill.

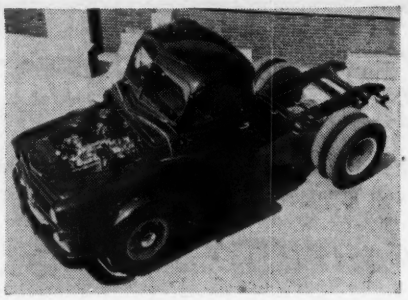
Correction

THE NEWS ITEM on page 96 of the February issue on Sludge-Ban Concentrate was incorrect in showing the fueloil additive to have a Ph rating of 7.1. It should have been shown as 7.0 and also should have stated that the concentrate emusifies water condensates instead of concentrates.

Made by: Parke-Hill Chemical Corp., 57 South 6th Ave., Mt. Vernon, N. Y.

Dodge B-3 Series Trucks Incorporate new Features

FIFTY new features are incorporated in the B-3 series of Dodge "Job-Rated" trucks announced recently. Horsepower increases in some of the 8 engines powering the new line range as high as 20%, with gross vehicle weight ratings ranging from 4,250 to 40,000 lbs.,



gross combination weight ratings up to 60,000 lbs. Higher governor settings, redesigned fuel pumps, "hotter" spark plugs with improved moisture-proofing, larger-capacity generators, high-torque starting motor and more efficient cooling systems are included among engine improvements.

New Oriflow shock absorbers are standard equipment on ½, ¾ and 1-ton models and brakes have been improved on all vehicles. A redesigned rear spring permits lower loading heights. Twin carburetion and twin exhaust is provided on the 2¾, 3 and 3½ ton models. On all models driver visibility has been improved by lowering the front of the hood line and thicker seat cushions and re-contoured seat backs contribute to greater driver comfort.

Made by: Dodge Div., Chrysler Corp., Detroit 31, Mich.

Weston pocket Instrument Indicates relative Humidity

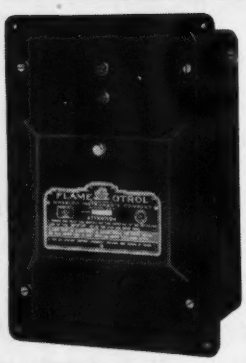
THE TAG Pocket Humidicator, model 8704, is shorter than a pencil and shows relative humidity by the wet-and-dry bulb method. It consists of two etched scale glass thermometers, secured in a white plastic case by resilient mountings. A built-in psychometric slide rule forms the cover for the case.

A few drops of water are applied to the thermometer wick and the instrument fanned or swung for several moments. Then, setting the wet-bulb reading opposite the dry-bulb reading on the slide rule indicates the relative humidity in per cent. The instrument can be mounted on a wall, if desired.

Made by: Weston Electrical Instrument Corp., 617 Frelinghuysen Ave., Newark, N. J.

instrumentality

EXCLUSIVE with FLAME-OTROL automatic tube warm-up



Instrumentality in the Flame-otrol gives you automatic tube warm-up—an exclusive Wheelco feature—which gives extra protection on the start-up by eliminating the possibility of human error. Remember, when you specify the Flame-otrol, you specify a compact, completely engineered package with these plus benefits: Instantaneous protection . . . Shut down or repeat of "lighting off" . . . Selective and adjustable timing programs for ignition cycles, purging and preventilating . . . Constant visual check of burner system operation.

Approved by Associated Factory Mutual Laboratories

Underwriters Laboratories

Write for Bulletin F2, Wheelco Instruments Company
868 W. Harrison Street, Chicago 7, Illinois

wheelco electronic controls

Looking for Results?

TRY "KEK" on that TOUGH JOB
GET ANY BOILER CLEAN
SAFELY and SURELY

REPAIR that LEAKY BOILER with the NEW

"REP" BOILER REPAIR

Successor to Kenite Boiler Repair
PERMANENT — ODORLESS

Ask Your Jobber or Order Direct. Jobbers Protected.
Write for FREE BULLETINS

KENITE LABORATORY
Madison New Jersey

A BURNING QUESTION FOR 1951...

How Can You Sell Oil Heat This Year?

GET THE ANSWER AT THE 19th National OIL HEAT EXPOSITION and OHI CONVENTION

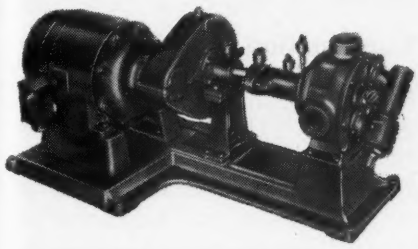
Chicago, April 2-6, Navy Pier, Palmer House

OHI

for full information contact OIL-HEAT INSTITUTE OF AMERICA, 6 East 39th Street, New York, New York Phone: Murray Hill 5-1638

Viking rotary Pumps In smaller Capacities

A NEW SERIES of Viking rotary pumps has been developed in capacities of 20, 35, 50 and 92 gpm. Previously they were available only in 200 gpm sizes. The new units are suited for pumping



all types of clean liquids, indoors or outdoors, featuring totally-enclosed construction with oil-tight and water-tight guards.

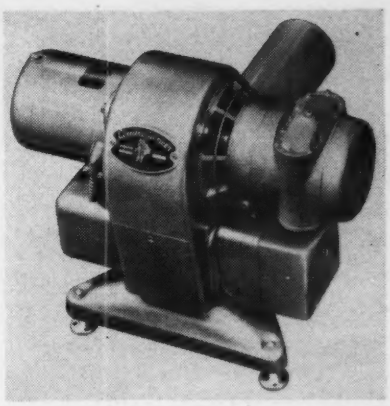
Standard construction features include an oil-tight case iron gear case with oil gauge, filler and drain plug, stainless steel pump shaft, extra long stuffing box on pumps, rust proof studs and nuts. A combination flange and foot type, bronze bushed bearing is mounted on pedestal for supporting gear case and pump shaft and the guard is built to accept 17, 19 or 21 tooth pinion for available speed range. A Viking relief valve on the pump head and ball check grease cups on pump and pedestal bearings are offered as optional equipment.

Made by: Viking Pump Co., Cedar Falls, Ia.

Combustion model dLP Is low pressure Burner

A LOW PRESSURE OILBURNER, model dLP, has been added to the Combustioneer line. Capacity ranges from .65 to 3.0 gph, featuring an index adjustment screw which is turned to obtain any desired capacity in the range. Engineering and design improvements in the burner's compound air and oil-metering pump permits this adjustment to be made without removing the pump and while the burner is running.

Combustioneer's "Triple Velocity" Visorhead, new air-oil atomizing nozzle, also is featured. Another innovation enables the dealer to convert any Combustioneer high pressure burner



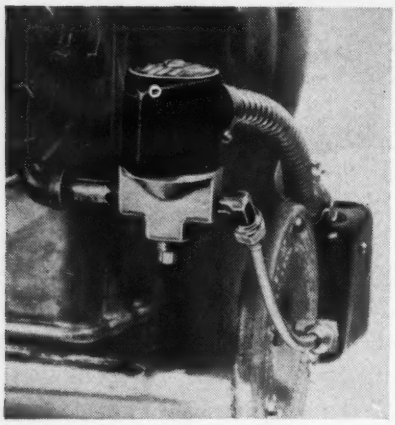
presently installed into a low pressure unit without removing the burner. A low pressure pump and nozzle assembly easily installed does the trick. In the same way the low pressure burner can be changed over to a high pressure model.

Made by: Combustioneer Div., The Steel Products Eng. Co., Springfield, Ohio.

Honeywell oil Valve With delayed Opening

A DELAYED OIL VALVE, developed by Mineapolis-Honeywell Regulator Co.,

MAID-O'-MIST
BALANCING VALVE
ADAPTER UNITS
MAKE ANY COPPER, BRONZE OR CAST IRON TEE A BALANCING VALVE!
No. 14
Balancing Valve Adapter Unit for 3/8", 1/2", 3/4", 1" nominal copper or bronze pipe size.
No. 15
Balancing Valve Adapter Unit for 1/2" or 3/4" cast iron tees.
Stocks of square head cocks or balancing valves are no longer necessary. These new units, quickly soldered or sweat-fitted into copper and bronze tees or threaded into cast iron tees, regulate the flow of hot water through radiators, convectors, baseboard panels, radiant coils, return mains and branches. Full free flow through the tee. No restriction except for the balancing required. Precision made of non-ferrous metals.
PRICES AND DETAILS FROM YOUR JOBBER, OR WRITE DIRECT TO
MAID-O'-MIST, Inc.
3221 N. Pulaski Rd.
Chicago 41, Ill.



Minneapolis 8, Minn., employs a spring loaded solenoid valve which holds up the flow of oil to the burner nozzle until the proper air supply is available. An electric resistor delays the opening of the solenoid valve for about 4 secs. after the burner motor starts.

Adaptable for installation on most old and all new high-pressure burners, the valve may be placed at any point between the pump and the nozzle. It can be mounted in any position and closes instantly in the event of power failure. Power supply is connected in parallel with the burner motor, and the conduit opening can be moved to any position to make wiring connections accessible and quick.

Made by: Minneapolis-Honeywell Regulator Co., Minneapolis 8, Minn.

Heating Industries Summit Steel Boilers in four Sizes

FOUR SIZES of steel boilers have been developed by Heating Industries. Size #10 has a net load standing radiation of 465 sq. ft. of hot water, 290, steam; size #16, 745 sq. ft. hot water, 460, steam; #22, 1020 sq. ft. of hot water, 640, steam and #28, 1300 sq. ft. of hot water and 810, steam. Models are available designed especially for radiant panel or forced circulation, for gravity hot water heating installations and are equipped with a built-in tankless water heater. Other types are a boiler equipped with a steam dome so that tubes are completely submerged and a hot dip galvanized model for hot water supply service.

The boilers are of fire tube construction, each tube including a spiral to impart turbulence to the gases. All models are heavily insulated with Johns-Manville blanket rock wool and all meet ASME construction requirements. Tubes are accessible for cleaning.

Made by: Heating Industries, Mt. Hawley Road, Peoria, Ill.

Combination electric Hammer And Drill made by Wodack

A SINGLE UNIVERSAL motor drives two types of drills in the Wodack "Do-All" combination electric hammer and

drill. In less than a minute the hammer member can be attached or detached. The hammer is used for drilling and chipping concrete and masonry, driving star drills, chisels and a number of other hammer tools. The drill member, equipped with a Jacobs key type chuck, holds drills and bits with shank up to ½".

PREFERRED
DRAFT-A-JUSTORS

Cut Fuel Consumption by

10% TO 30%

The *Preferred* Draft-A-Justor is the original, patented Draft-A-Justor . . . improved to include the latest in engineering developments.

Stainless steel bearings and weather resistant metals provide long-life service without breakdown due to rust or wear . . . assure *continuous* fuel savings.

Millions now in satisfactory use.

WRITE FOR DESCRIPTIVE LITERATURE AND TRADE PRICES.

SIZES

Stove, domestic and commercial sizes from 4" to 24" in diameter.

Industrial sizes from 2' x 2' to 5' x 12'.

PREFERRED UTILITIES MFG. CORP.
1860 Broadway, New York 23, N. Y. Boston Office: 839 Beacon St.

AUTOCRAT OIL BURNERS

OFFER HEAT PLUS ECONOMY

FOR YOUR CUSTOMERS

with the NEW COMBUSTION HEAD

This famous Autocrat Line is one of the oldest and finest in America. As a Dealer, you can safely recommend Autocrat Oil Burners to your customers. You may promise efficiency, dependability and economy . . . and Autocrat with the new Combustion Head will live up to your promises. Write at once for prices and liberal Dealer discounts.

Manufactured by
CHANDLER COMPANY
CEDAR RAPIDS, IOWA

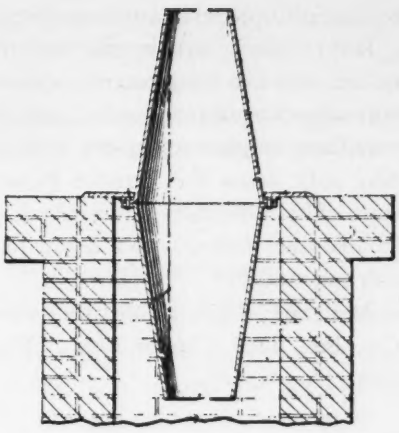
The tool, which is operated from a lamp socket or generator, has ball and needle type bearings and features a hammer mechanism that has been designed for easy maintenance. Star drills are supplied in 20 diameters from ¼" to 1½", drilling depths to 24".

Made by: Wodack Electric Tool Corp., 4627 W. Huron St., Chicago 44, Ill.

S & M Fuel Economizer Installed atop Chimney

THE S & M ECONOMIZER, consisting of two galvanized iron cones, joined together at their bases, is installed atop a chimney to boost and balance draft. Its operation is described as maintaining a steady flow of warm air moving up the chimney, heating it throughout and drying out soot and carbon accumulations so that they are dissipated.

Available in different sizes, the Economizer is designed to balance draft conditions and prevent them from varying, regardless of outside weather conditions, so that the positive draft can contribute to a reduction in stack



temperatures and an increase in CO_2 readings.

Made by: S & M Fuel Economizer Co., 15-23 Parmelee Ave., Fairlawn, N. J.

Fusol No. 2 for use in Home fueloil storage Tanks

FUSOL NO. 2 is a fueloil additive, designed to keep burners, strainers and pipelines free of sludge and sediment, prevent pump noise caused by gumming, eliminate pump-outs and reduce service costs. Directions indicate that a 1 pt. can of the compound is poured into the tank each time it is filled. The one can is sufficient for quantities up to 300 gals.

Tank sludge is dispersed through the oil for total combustion, with the constant use of Fusol No. 2 described as a means of maintaining constant viscosity to insure better atomization and a minimum of soot and carbon formations.

Made by: Maxfal Chemical Co., 33 West 42nd St., New York, N. Y.

Lennox Oilburners equipped With Micro-Mix Head

ALL LENNOX high pressure oilburners are to be equipped with a new Micro-Mix combustion head and Visi-Trol air adjustment. Visi-Trol is a rod with a slotted end that extends from the front of the burner to the combustion head. By turning the rod primary air can be adjusted while the burner is running.

It regulates the size of openings in the tubing around the nozzle and also

There's Something Special about a FLEXIBLE COUPLING when it's a

LOVEJOY L-R

Lovejoy Flexible Coupling Type UX

Lovejoy Flexible Couplings are specially designed to provide quiet, smooth running operation between motors and fans, pumps and blowers. Rubber center unit increases flexibility and eliminates noise. For maximum absorption of shock, vibration, backlash and surge, with maximum correction of misalignment, specify Lovejoy Flexible Couplings.

WRITE FOR COMPLETE LOVEJOY CATALOG

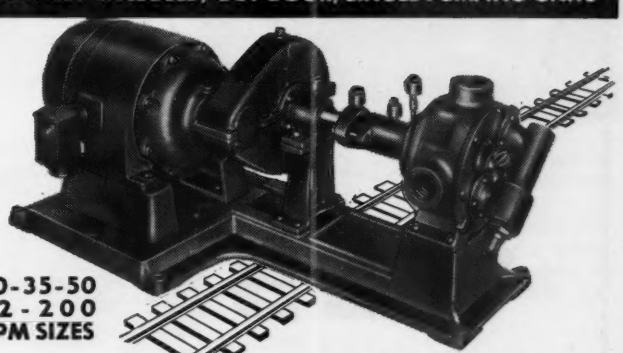
A point to remember—MOST FAN MANUFACTURERS SUPPLY BLOWERS WITH L-R JAWS ON BLOWER HUBS.

LOVEJOY FLEXIBLE COUPLING CO.
5012 W. LAKE ST. CHICAGO 44, ILLINOIS

Also mfrs. of Lovejoy Universal Joints and Lovejoy Variable Speed Transmissions

VIKING

FULFILLS THE NEED FOR A COMPLETE LINE OF TOTALLY ENCLOSED, OUT-DOOR, SINGLE PUMPING UNITS



20-35-50
92-200
GPM SIZES

For fast, clean, loading and unloading of petroleum products and other liquids up to 11,000 S.S.U. Ideal for installing out of doors without protection of any kind.
Reduce your pumping time with these big, rugged units. Built to take it.

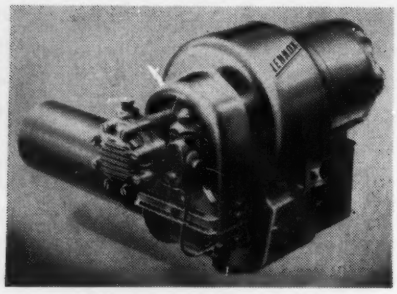
OUTSTANDING FEATURES:

1. A complete range of sizes. See capacities listed at left.
2. New, oil-tight, cast iron gear case. No leakage.
3. Radial bearing for pump shaft on 200 gpm size. Bronze bushed sizes.
4. Stainless steel pump bearing for smaller shaft. No rusting.
5. Viking valve on pump head (Optional).
6. Extra long stuffing box on pump. Leak resistant.
7. Speed and capacity range available for each size pump.
8. Five ball check grease cups. (Other style grease fittings optional.)

VIKING AN HONORED NAME IN PUMPING

For complete information, send for free bulletin SP-223AEE today.

Viking PUMP COMPANY
Cedar Falls, Iowa



the openings' positions in relation to the air vanes. As a result the fire can be "tuned" for high efficiency, while kept under observation.

Made by: The Lennox Furnace Co., Marshalltown, Ia.

Little Giant Vaporizer Humidity control Unit

LITTLE GIANT VAPORIZER units are installed in warm air furnaces, with the intake side of the vaporizer taking air out of the hot air duct, passing it through the unit and back out through the outlet side into the cold air return. A fine spray of water is projected into the air stream to add humidity, with the capacity of the vaporizer sufficient to humidify properly a 6-room house.

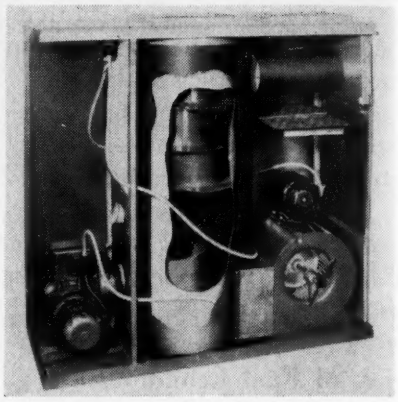
It is recommended also that the unit be attached to a humidistat to operate only when humidity is needed and also wired into the electrical system to function only when the furnace blower runs. The vaporizer is described as trouble-free, backed with a 2-year factory guarantee.

Made by: Little Giant Vaporizer Co., Inc., 5101 Classen Blvd., Oklahoma City 6, Okla.

Penn Boiler announces Lo- and Hi-boy furnace Units

OILFIRED PENN Lo-Boy and Hi-Boy warm air furnace units have been announced for small home heating applications with capacities up to 70,000 Btu/hr. High pressure atomizing oilburners fire the units at 0.85 gph. Two Hi-Boy models measure 21" long, 69" high and 21" wide; a Lo-Boy model is 50" long, 50" high and 22" wide.

Both Hi-Boy units have a supply opening on top and return opening on back of the furnace. The Lo-Boy model is equipped with supply and return

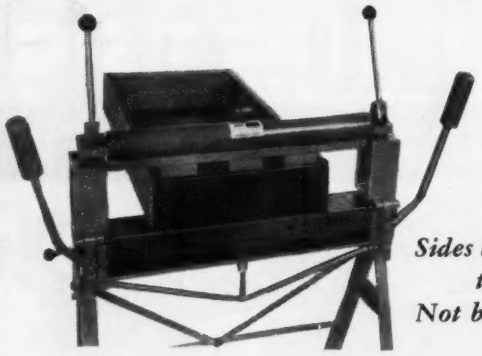


openings on top of the furnace. Both types are of all-welded 1/8" high test steel plate construction, designed to occupy a minimum of floor space. All models are factory engineered, assembled and wired.

Made by: Penn Boiler and Burner Mfg. Corp., Fruitville Rd., Lancaster, Pa.

Reynolds flow-regulating Valve made in two Sizes

REYNOLDS flow-regulating valves are for use where an exact setting of the regulated flow of water, or other



Sides are formed to box
Not box to sides

WEBCO

Makes the only box brake that is open which allows sheet to remain flat thru-out operation.

Makes the only slip end brake on which ducts and other similar products can be locked and removed from machine.

IN TWO SIZES — 30 INCH AND 48 INCH

WEBB MACHINE & TOOL CO.
600 WASHINGTON ROAD PITTSBURGH 28, PA.

Used by Leading Oil Companies Coast-to-Coast!

*Reg. Pat. Pend.

THE ORIGINAL **TANKIT***

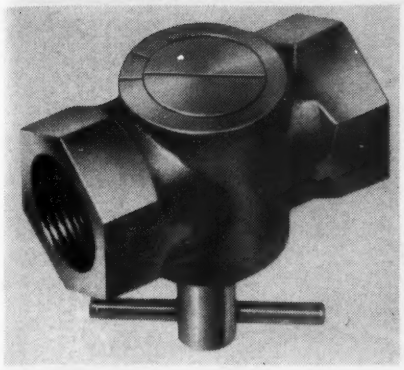
CLEANEST, FASTEST EASIEST WAY TO STOP ANY FUEL OIL TANK LEAK

NO...
...EXPENSIVE PUMP-OUTS
...CELLAR DAMAGE
...TIME WASTED
...LACK OF HEAT
...CUSTOMER INCONVENIENCE

2 SIZES!
Junior for Small Leaks
Senior for Porous Areas (18 Sq. In. Patch)

Stops fuel oil tank leak in 2 minutes. Replace tank at your convenience. Pressure can be applied wherever leak occurs. Locate leak with flame mirror. Push patch into position on tank, even low-legged or twin tanks. Band is so flexible, pressure can even be applied at an angle. Kit packaged in metal container to protect band and parts. Economical—and same patch can be re-used indefinitely. ***Available at Your Supply House. Or Write Direct for Full Information and Name of Nearest Distributor.***

The TANKIT Company 17 Shepard Ave. Newark 8. N. J.



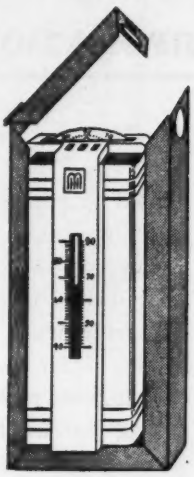
liquids, is desired. Among its uses are applications as by-pass valves on boiler feed lines. Specifications indicate a ¾" pipe size, 2½" long, with a choice of two different type plugs: R-V #1, full ported with area of 1" pipe in port; R-V #2, ¼" port for fine adjustments. R-V #2 may be used in place of needle valves.

"O Ring" packing, with which the valves are provided, prevents external leaks at almost any pressure and exceptionally close fitting permits only the slightest internal weeping. The valve is operated by finger-tip pressure, a one-quarter turn opening or closing it. Larger sizes may be produced for special applications.

Made by: Reynolds-Shaffer Co., 12100 Cloverdale Ave., Detroit 4, Mich.

Thermolok prevents Tampering with Thermostat

A LOCKING DEVICE that prevents tampering with thermostat settings has been announced under the trade name Thermolok. The device, models for which are available to fit all popular makes of thermostats, locks around the control and does not interfere with air flow.



It is intended for use in apartment houses, offices and similar locations where it is desirable to keep employees or tenants from changing settings. Thermoloks are snapped in place without nails or screws and do not require any holes cut in walls. They are equipped with locks and keys.

Made by: Thermolok Mfg. Co., 541 Rogers Ave., Brooklyn 25, N. Y.

Everlasting adds to Line Of Boiler blow-off Valves

ADDITION of a straightway "Y" type valve has been made to the Everlasting line of boiler blow-off valves. They are offered in 1½", 2" and 2½" sizes, in cast-iron or steel for pressures up to and including 600 lbs.

The valve head or disc is made of "H" monel metal and the seat of monel metal. The seat is renewable and is provided with upper and lower sealing gaskets, while the stem is made of stainless steel and the stem nut of bronze. All parts are easily renewable without the use of special tools.

Made by: Everlasting Valve Co., 49 Fisk St., Jersey City, N. J.

PREFERRED
Anti-Syphon Valves

PR-194

APPROVED BY
UNDERWRITERS' LABORATORIES, INC.

Permits pumping of oil but closes to prevent syphoning in case of suction line break.

FOR OILS UP TO No. 5
Valves C5 and C10 are available in ⅜" and ½" sizes.

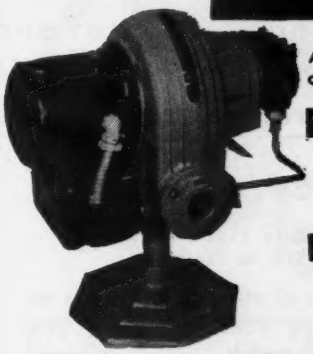
FOR OILS UP TO AND INCLUDING No. 5
Valves B5 and B10 are available in ¾" and 1" sizes. (1" size is built up from ¾" size with fittings.)

FOR OILS UP TO AND INCLUDING No. 6
Valve A is available in 1¼", 1½" and 2" sizes for 5 or 10-foot head pressures.

You can be sure of the best when you order from Preferred, the oldest and the largest manufacturer of anti-syphon valves.

PREFERRED UTILITIES MFG. CORP.
1860 BROADWAY, NEW YORK 23, N.Y.

important OIL BURNER FACTS ABOUT Radiant
THE SERVICEMAN'S BURNER



A nation-wide survey conducted by our advertising agency showed that

1. RADIANT burner performance is equal to the highest price burner. Yet they are priced to meet the lowest competition, even on project work.
2. Heavy sales are due to
—low cost of upkeep
—ease of installation and servicing
—factory guarantee
—national distribution in protected territories

Write for complete details

New model equipped with Shell designed combustion head

VISIT US IN BOOTH NO. 436
NATIONAL OIL HEAT EXPOSITION • CHICAGO • APRIL 2-6

RADIANT UTILITIES CORP.
8817 18th AVE., BROOKLYN 14, N. Y.

KLEENMASTER Makes Servicing Profitable

Eliminate your service loss on oil accounts. Kleenmaster grosses $7.00 per customer after selling expense and labor.

Keep your Drivers and Servicemen busy during the summer slack.

The "Big Bag" with your name in large type gives you "Billboard and Soundtruck" advertising.

Write for details including
Sales Manual and Profit Analysis

MOLLOY MACHINE CORPORATION

3445 N. Western Ave.
CHICAGO 18, ILL.

Watts Snapak Holder For meter Tickets

WATTS SNAPAK meter ticket holder is constructed of duralumin and folds into a closed box that fits into the coat pocket. It has a nickelled clamp on the right side of the Snapak to hold 20 Metersets and is provided with a hinged aluminum writing plate. After the ticket has been written each Meterset may be snapped from the clamp without disturbing the remaining supply. The other side of the holder contains space for used ticket, with a hinged snap-down crosspiece to keep them in place.

The company describes the use of the holder as involving preparation of the meter ticket, snapping the set out of the holder and inserting it in the printing meter. When delivery is completed, the customer signs for the delivery, receives a copy of the ticket and the remaining copies are slipped in the storage compartment.

Made by: Alfred Allen Watts Co., Inc., 216 William St., New York 7, N. Y.

Automatic Watchman checks For high stack Temperatures

THE AUTOMATIC WATCHMAN, a device to enable the homeowner to know when his heating system is functioning inefficiently, with resultant excessively high stack temperature, fastens to the smoke pipe. The unit has a pointer which under normal conditions is visi-

The PORTMAR
Residential Double-Duty
BOILER
Gives your customers Economical Heat and Year-Round Automatic Domestic Hot Water

Manufacturers! Jobbers!

Steam from 320 to 1100 ft.
Hot water from 510 to 1760 ft.

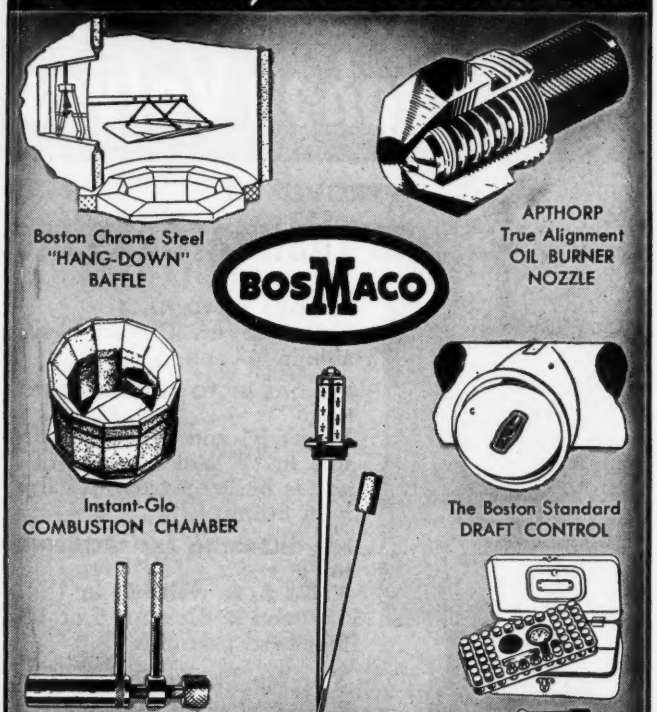
PORTMAR has designed and manufactured this exceptionally fine double-duty boiler to satisfy your customers' most exacting demands.

Check these selling points!

- √ Combined Boiler and Hot Water Heater
- √ Built for Oil or Gas Firing
- √ Maximum Efficiency In Both Utilities
- √ Attractively Priced
- √ Tastefully designed
- √ Extended and Flush Jackets
- √ Economical to Operate
- √ Heavy Gauged Steel Tubes Insure Long Life of Boiler
- √ Flush Jacket Boilers where Minimum Space is Required

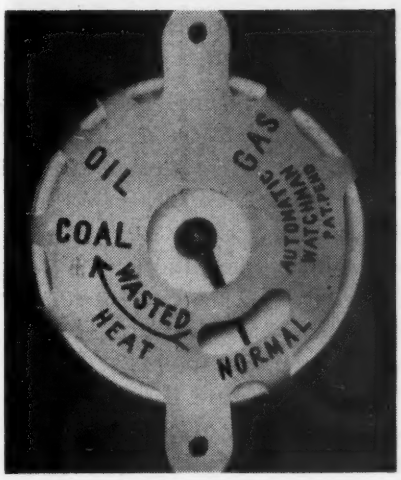
PORTMAR BOILER CO., INC.
193 - 7th STREET BROOKLYN 15, N.Y.

FOR Quality INSTALLATIONS



WRITE FOR COMPLETE INFORMATION

BOSTON MACHINE WORKS COMPANY
Oil Heating Supplies Division, Manufacturers, Lynn, Mass.



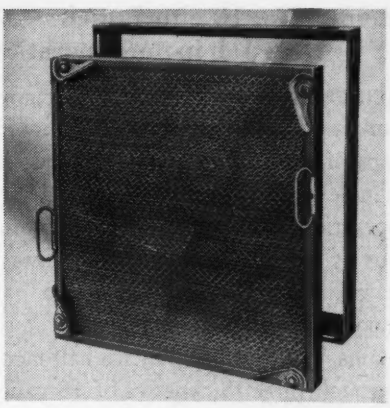
ble through slot on the face of the instrument. As stack temperatures rise the pointer moves upward to an area labelled "wasted heat."

Made by: Samberg Mfg. Co., Fidelity Bldg., Cleveland, Ohio.

American Type HV is High velocity air Filter

THE AMERICAN TYPE HV, high velocity unit air filter, has been introduced. It is made of corrugated strips of fine mesh wire, in which the corrugations taper so that when two strips are placed together they form a series of pyramid-shaped pockets. The small ends of the pockets are closed to the air flow to eliminate any open air passages through the media.

The filters are meant to operate at velocities up to 500 fpm, maintaining

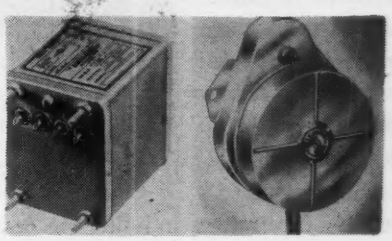


high cleaning efficiency over a wide range of velocities. They are serviced with washing and charging tanks, reconditioned by washing out accumulated dust with a hose and spraying with a filter adhesive.

Made by: American Air Filter Co., Inc., 215 Central Ave., Louisville 8, Ky.

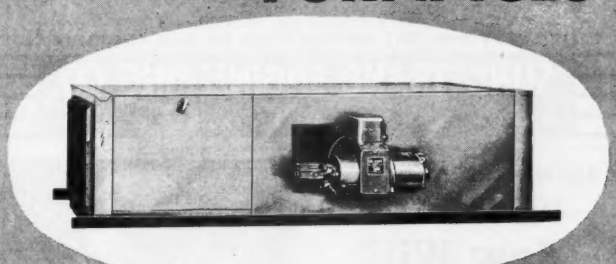
Haydon A.C. timing Motors, Hermetically sealed Enclosure

A. W. HAYDON CO. has announced a line of standardized A.C. timing motors, of the synchronous hysteresis type. They feature high starting and running torque and quiet operation. A considerable range of speeds and current ratings is available and the motors are described as capable of running at full



synchronous speed despite variations in line voltage. Standard motors can be furnished from stock or complete

QUIET AUTOMATIC
OIL FURNACES
SUSPENDED
OR LAYDOWN
AIR CONDITIONING
FURNACES



SPACE SAVER
Excellent for service stations, stores or basementless homes...Four sizes: 85,000 btu, 142,000 btu, 175,000 btu, 240,000 btu. Completely assembled with blower, filter, insulated combustion chamber, the world famous Quiet Automatic Oil Burner with 2-stage pump and all controls.
WRITE TODAY FOR FULL DETAILS
FACTORY AND WAREHOUSES 17-19 GROVE ST MONTCLAIR (Newark Suburb) NEW JERSEY
QUIET AUTOMATIC BURNER CORP.
ESTABLISHED 1925 • J. GORDON RAVENT, PRES.
33-35 BLOOMFIELD AVE., near Broadway
NEWARK 4, NEW JERSEY
BRANCHES OR DISTRIBUTORS FROM MAINE TO FLORIDA, CHICAGO ST. LOUIS AND ALL IMPORTANT CITIES

PLENTY of PROFITS with KENT
Double Suction FURNACE CLEANERS

Your KENT is engineered for performance . . . brings you profits . . . does a real job! You get valuable leads on new installations and repairs too!
• Low center of gravity, less chance of tipping!
• No outside dustbag, no dust passes through fans!
• Toggle switch with convenience outlet for extension light.
• KENT is built to last!

You're invited to the KENT Booth, No. 149 National Oil Heat Exposition
April 2-6 — Chicago, Ill.
The KENT Double Suction Furnace Cleaner separates into 2 parts for easy carrying:
CLEAN WITH KENT EQUIPMENT
The KENT Co., Inc. • 434 Canal Street • Rome, N. Y.

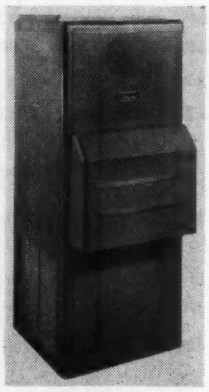
timers can be designed, if desired.

The company also offers a hermetically-sealed enclosure for the timers.

Made by: A. W. Haydon Co., 109 W. Main St., Waterbury, Conn.

Sphinx series 0-100 is Oilfired winter Conditioner

SPHINX SERIES 0-100 is available in three models, developing Btu outputs of 72,800, 84,000 and 96,000. Model F-HP burner, fired at gph rates of .65, .75 and .85, is used in the unit, which is of compact Hi-Boy design, 25" wide, 30" deep and 61" high. The height is increased to 65" when a base return and filter are used. "Heat-Saver" flue, special baffles and corrugations are standard in all models, each of which provides 7,000 sq. ins. of heating surface in its heavy gauge steel heat exchanger.



Reversible filter doors incorporate duct attaching flange, which fits either side, with a solid panel furnished to close unused openings. For convenience in installing in confined space the flue pipe may be taken off from either the front or rear of the unit.

Made by: C. L. Bryant Corp., 4610 St. Clair Ave., Cleveland 3, Ohio.

Reiner No. 10 clip Punch Does Job in one Operation

REINER NO. 10 clip punch, designed for fastening slips or other seams or laps of metal on ductwork, is easy to handle and performs its job in one operation. No hammering or flattening out of metal is necessary, but instead it is necessary only to punch a half moon through the metal, where it remains. The tool will punch a half moon through three thicknesses of 18 gauge metal.

The No. 10 clip punch has a throat 1" deep, with its handles measures 27" and weighs 6½ lbs.

Made by: Reiner & Campbell Co., Inc., 19 Euclid Ave., Newark 5, N. J.

Three Sizes of Staples For fastening copper Tubing

THREE SIZES of Tube-Tite staples have been designed to fasten copper and brass tubing in radiant heating and similar applications. The staples, made of copper, with a steel core for strength, are offered to fit ⅜", ½" or ¾" nominal tubing. The first two sizes are made from flat stock; the largest is a round top wire staple.

Tube-Tites were designed to provide a low cost, quick fastener, with solid copper surfaces to prevent galvanic action between the staple and the tubing. Packaged in cartons of 100 or 500 staples.

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Forsberg adds Model No. 2 To Whiz-Saw tool Line

A LARGER MODEL added to the line of Whiz-Saws has been designated model No. 2, and is a larger counterpart of model No. 1. It is described as a multi-purpose cutting tool for use on wood, bone, fibre and other composition ma-

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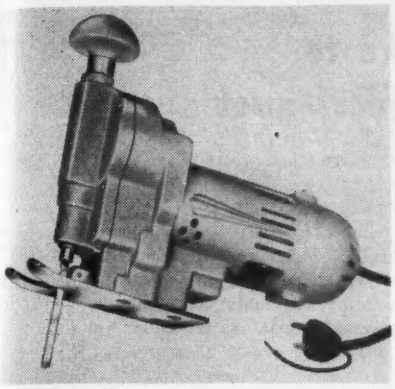

terials up to 2" in thicknesses. When equipped with a high speed blade, the tool will cut light gauge metals.

Model No. 2 can be used as a rip, cross cut or scroll saw, weighs 6¾ lbs.,

Made by: Forsberg Mfg. Co., Seaview Ave., Bridgeport 1, Conn.

◈

Thomas G. Jones has been appointed sales representative in the New England States, with the exception of Connecticut, by the Utica Radiator Corp., Utica, N. Y. He has been with the company for nearly 20 years and replaces T. W. Gladwin, who has retired.

Book Shelf

Air Conditioning Textbook Second Edition enlarged

THE FIRST EDITION of "Modern Air-Conditioning, Heating and Ventilating," by Carrier, Cherne, and Grant, was published in 1940, and went through five printings, being widely used by engineers and equipment dealers, and students studying on their own and taking courses in engineering colleges, technical institutions, and trade schools.

Now, shortly after the death of Dr. Willis H. Carrier, the second edition of this worthwhile book has been made available. Dr. Carrier, responsible for much of the valuable scientific data in the book, is known as the father of air conditioning. His original Rational Psychometric Formulae, presented in a formal lecture in 1911, became the authoritative basis for all fundamental calculations in the air conditioning industry. The new book contains Dr. Carrier's newest psychometric chart based on enthalpy, which has become the standard chart of the American Society of Refrigerating Engineers.

"Modern Air-Conditioning, Heating and Ventilating" fulfills its stated objective of providing an effective link between existing theory and actual practice. The authors have an outstanding knowledge of all the theories behind their subject; the combined theoretical knowledge of the three noted authors forms an unparalleled basis for the book. More important even than that, the three authors have had unique opportunities to check thoroughly on the practical values of their ideas and recommendations, through their years of work with the Carrier Corporation. This book does not contain the sheer theory and untested ideas of college professors. It represents the ultimate in theory, plus the results of vast on-the-job efforts to apply the theory.

A wealth of subjects are covered on the theoretical level and the practical level of design, application, and proper use of equipment. These subjects include heating, ventilating, air conditioning, and related refrigeration engi-

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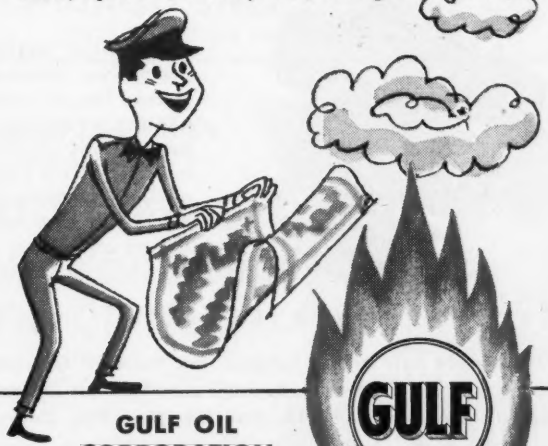
A warm welcome and a surprise package full of ideas await Gulf Branded Fuel Oil Dealers at this year's OHI show, April 2-6, at Navy Pier, Chicago.



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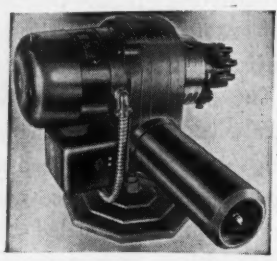

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neering. Attention is given to figuring costs in order to determine the most economical investment in equipment.

Subjects given extended treatment in the new edition include radiant and panel heating, air purifying methods, electrostatic precipitation, cooling coil data, and automatic controls. The sections on steam heating system and hot water heating systems include 40 pages, for example. John W. Schulz is credited with the section on details of automatic oilburners.

Of particular importance to equipment dealers are the sections on practical design data for air duct systems, air distribution and location of supply grilles and diffusers, every aspect of velocities in ducts and at supply and return registers, and guarantees for air-conditioning installations.

Invaluable for serious-minded beginners at heating and air-conditioning, all the way to past masters among top engineers, this book belongs in the book collection of every man interested in its technical aspects; it can take the place of half a dozen other books that deal with its subjects.

Published by Pitman Publishing Corporation. Page size 6¾" x 10", 574 pages, price $10.

Johnson and Auth's Fuels and Combustion Handbook

DESIGNED FOR all who have an interest in the selection or use of any type of fuel, Johnson and Auth's "Fuels and Combustion Handbook" was compiled with the cooperation of more than 450 authors and copyright owners.

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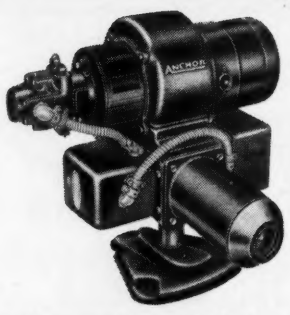

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Details of the new Anchor franchise that threatens to revolutionize the industry will be made public at the National Oil Heat Exposition, Anchor Booth 214, April 2-6, Navy Pier, Chicago.

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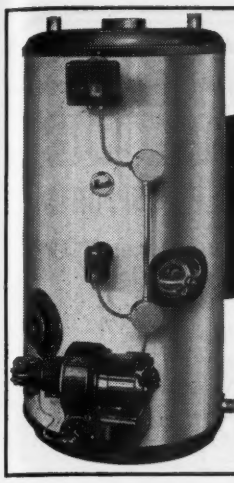

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Basic types of combustion of the various fuels and combustion equipment are discussed, with such factors as heat balances, smoke prevention and draft requirement given ample treatment. Numbers of tables, figures and charts afford ready reference to the problems and questions encountered in the selection and use of fuels, with special features including application of rapid computation technique of alignment charts, replacements of formulas by tables and graphs wherever possible, broad use of comparative tables to show advantages, disadvantages, features, applications, average performance data and general characteristics of optional equipment or methods.

Editor Allen J. Johnson is a consulting mechanical engineer with nearly 30 years' experience in the fuels and combustion field. Associate Editor George H. Auth is Professor of Mechanical Engineering at Villanova College and has a broad industrial background which also includes consultation and research work.

Published by Mc-Graw-Hill, 330 West 42nd St., New York, $12.50 per copy.

◈

Harry E. Milton, president, Milton Oil Co., St. Louis, has been elected chairman of the Iowa-Missouri-Nebraska district, Oil Industry Information Committee. Mr. Milton also is president of the Missouri Petroleum Association.

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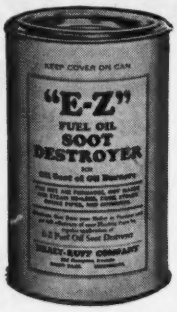

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Everyday Snags

Oddest Room to Heat

"Its heat loss of 133,800 Btu per hour makes this living room the oddest room I've ever figured," says a New Jersey heating engineer well known for coming up with successful answers to odd heating problems.

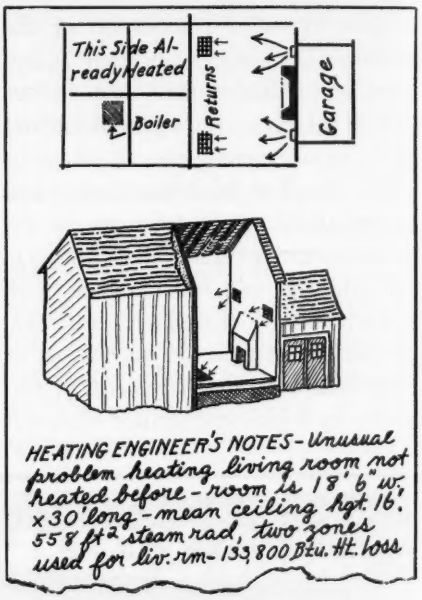
Now the field representative for one of the largest manufacturers of oil-heating equipment, this engineer went out on a routine call reported to involve heating a room not heated previously. It turned out to be some room! The mean ceiling height is 16 ft.; width is 19 ft., and length is 30 ft. Made up of exposed beams and the underside of the shingles, the ceiling is the owner's delight and the heartache of a heating expert.

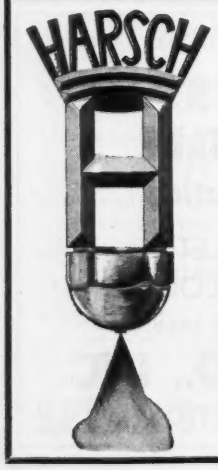
"The ceiling is beautiful to look at, indeed!" exclaims the heating engineer, "and for holding in the heat, why it's more effective than having a bedsheet over the top of the house!"

The other rooms in the house being steam-heated already, the only problem was to heat the living room, of course complying with the stipulation that no space be taken up by radiators.

This answer to the problem was worked out. Two small, inconspicuous warm-air supply registers will be located high on the living room wall, as the accompanying drawing shows. A bank of steam coils will be behind each, located high in the attached garage. Air circulation is forced, of course. Each register will provide 90,000 Btu per hour. Two return registers, duct-connected to the steam-powered units that heat the air, will be in the living room floor, as the drawing shows. The supply registers will be adjustable every way, both vertically and horizontally, so that the warm air they provide can spread sideways and can at the same time move downwards gently so as to avoid high ceiling temperatures which would waste fueloil.

The plans for heat controls illustrate very well the thoroughness of the engineer. First, a thermostat and a 2" motorized steam valve will control the heat in the part of the house already steam-heated. Second, each of the two steam coils heating the living room will receive steam from a 2" motorized steam valve controlled by one of the two room thermostats to be located in the big living room. That provides a two-zone control system for the living room, one thermostat taking care of heating each end of the room. As the third feature, each of the three motor-


This Side Already Heated
Returns
Boiler
Garage
HEATING ENGINEER'S NOTES - Unusual problem heating living room not heated before - room is 18' 6" w. x 30' long - mean ceiling hgt. 16'. 558 ft² steam rad, two zones used for liv. rm - 133,800 Btu. Ht. loss



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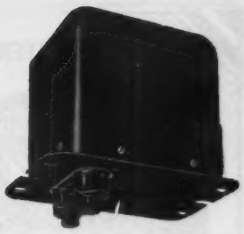

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WRITE FOR *Literature*

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"The Dongan Line Since 1909"

ized steam valves will have a switch to start the oilburner, and steam will not be generated unless one of these valves is open, indicating heat is needed. When all three zone valves are closed because no heat is needed, the boiler temperature will stay at about 170° for water-heating purposes.

The engineer's plans call for a new boiler-burner unit, large enough for the increased load. They call also for running a 3" steam line from the boiler to the garage, through the unheated space under the living room. Whoever finally gets the contract to do the work won't like one detail of installing this steam line. At one point, it goes through a solidly-built stone wall 16 inches thick!

* * *

New Nozzles Needed

"The service man who got snarled up on p. 132 of your September issue did not know enough to install a new nozzle right away on a job having a three-year-old burner which still used its original nozzle," writes in a Milwaukee service man.

He tosses in, "Where were his brains?" but seemingly does not expect his question to be answered in the Readers' Problems department.

A FO&OH Short Short Article on Burner Service, on p. 132 of the September issue, had indicated the bungling service man had spent three hours on one no-heat call, winding up finally by getting good, clean combustion by providing the burner with the new nozzle it needed at the start.

Outraged, the Milwaukee service expert winds up with this excellent advice, "Any time there's trouble with a low-capacity burner nozzle that's been in use three years, you don't clean and reinstall the nozzle. You take it out, throw it away, and install a brand-new nozzle.

"Today some experts are arguing that a small pressure burner needs a new nozzle every year. True, it can be argued back that this is going too far, for it's one extreme in that nobody is ever going to recommend changing to new nozzles more frequently than this. On the other hand, a service man who tries to get by more than three years with a low-gph nozzle by cleaning it on the job certainly is balmy, going to the other extremity, and trying to get too much life out of an old nozzle. Your account of trouble caused by failing to replace a three-year-old nozzle at the drop of a hat, certainly brings this out most clearly."

* * *

Stops Loss of Prime

When a pressure burner is on the borderline of giving chronic trouble of loss of prime, often the trouble can be sidestepped, at least for a few months, by dropping the atomizing pressure a bit.

This oil company man is not 100% equipped for servicing burners. He goes out with tools but without spare parts for burners. He's always ready to take a look at a sick burner owned by one of his customers, and he tries to be helpful.

Late one night, in coldest weather, he went on a no-heat call and found the burner air-bound. When he pointed out to his customer that the burner was connected to a 550-gallon,

A BURNING QUESTION FOR 1951...

What's New in Oil Burners?

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outside tank but had no return line, and that this was the cause of the air-binding, the customer replied that the job had been running swell for three years. Further conversation brought out that this was a fine time for the burner to need an expensive return line. Dependable heat was needed because a child in the house had a bad cold, and its mother was coming back from the hospital with a new baby. Paying for a new return line before next summer was out of the question, said the worried father.

The oil man watched the burner airbind several times, never running more than 20-minutes without getting into trouble, and considered donating a return line or installing one right away and collecting for it next summer. He ruled out both ideas mentally because they represented charity rather than good business. Then he telephoned a burner expert, waking him up and asking for first-aid ideas that might keep the burner running dependably a few months.

"I'm afraid you'll find 90 or 100 lbs. atomizing pressure, but I hope you find 125 lbs. or higher," said the expert over the phone. "Anyhow, use a gauge and find out the atomizing pressure. Whatever it is, drop it 25 lbs. The job's been running all right three years, but now the fuel unit's gotten weaker through wear. It's gotten to the straw that breaks the camel's back, and even with the tank three-quarters full can't quite make the grade. Dropping the atomizing pressure 25 lbs. will help the pump slightly, and will put the job back on the same basis of operation it was a year ago. A pump air-rids itself easier at lower pressure."

The oil man found the idea 100% successful, for when adjusted for the lower pressure the burner ran dependably for months. A new nozzle rated at slightly higher gph was used in place of the old nozzle, to keep up the firing rate with the pressure reduced.

Sometimes switching to the lower pressure gives decidedly poorer atomization and combustion, and sometimes it doesn't. Where it does, a man's got to figure that he can't have everything. To have the burner run dependably for a short time, even with poorer burning, may be better than having frequent breakdowns.

The idea works well also for two-line jobs, that is for jobs which have return lines but which start airbinding because of slight suction line leaks or need to replace old, weak fuel units.

The converse idea is that fuel units, especially one-stage units, have greater tendency than usual to airbind when adjusted for unusually high atomizing pressures, that is pressures between 125 and 150 lbs. On some jobs it's best to consider this when adjusting burners, and on others there's no need to bear it in mind.

◈

John S. MacFerran and *Robert J. Hughes* have joined the sales staff of Perfection Stove Co., Cleveland 4, Ohio. Mr. MacFerran has been employed to travel the Milwaukee, Wis., area for the company's Chicago Sales District. Mr. Hughes is functioning as a sales representative in the St. Paul, Minn., District and will travel the Mason City territory.

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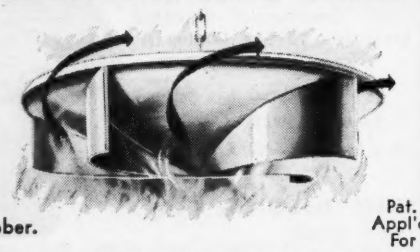
Every Conversion needs a FIRE-SWIRL BAFFLE.

Get the facts, clip this to your letterhead, or see your jobber.



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Useful Ideas Contest

(*Begins on page 85*)

returned to my office. My plan involves a percentage scale by which the charge for the clean-up work is reduced according to the length of time the customer holds his contract. The longer he holds his contract, the greater the cost of fulfilling it.

"Along with this I have found it more profitable to put the men on a unit basis for clean-up work. They are theoretically in business for themselves and thus have incentive to get out more work in less time. To avoid sloppy work by these men, I have a trained mechanic give each job the final check-up. This creates better good will all the way around. The clean-up men make good money for dirty work, and the check-up mechanic is happier to work on a clean system, and the customer is happier to know his heating system has been okayed by an experienced man. Last but not least, I find we get two unit clean-ups more per day than when on an hourly basis. My costs can, of course, be figured accurately on this basis, for there's no guessing about how much time the men will take per clean-up job, and how much the pay will be."

Mr. Murphy knows what he's talking about. With 26 years of oilheating experience behind him, he's been a service man, then the representative of a large burner manufacturer, and now for 16 years he has been an installation and service manager.

From Appleton, Wis., comes a contest entree which is representative of many entries that won no prizes, and now win no cash awards. Classify as you like the idea that fueloil tanks be made of plastic, as this Wisconsin oilheating enthusiast suggests, so that an owner can see how much oil he has on hand, check on the grade of oil delivered, and look for settling of water and sediment in the tank. Some gauges used today stick or freeze, the contestant points out, while others are not accurate.

Here's an example of an idea that did not make a hit in the contest. Sorry, no check for this goes to Orangeburg, S. C. With 18 years of experience behind him, the contestant finds many service calls are caused by sediment in oil tanks, strainers, filters, and nozzles, and believes following two steps will help this. First step: each oil dealer should clean each customer's tank at a nominal charge before the summer fill-up. Second step: train delivery men to turn off oilburners when making deliveries. If the driver does not want to wait long enough, after delivering oil, for the sediment to settle in the customer's tank, then he can instruct the owner to turn on the burner switch later.

The contest entries related to this won no awards, but several contestants find that important amounts of soot and products of combustion are blown from typical smokepipe regulators when oilburners start. A Baltimore, Md. man recommends preventing this by putting the draft regulator two feet below the smokepipe. Do you recognize this as the "elephant's trunk" idea which has been shown a few times in FUELOIL & OIL HEAT?

On the subject of soot blowing from a draft regulator when a burner starts, there's a contest entry from Newark, N. J. that wins no award. It's a long

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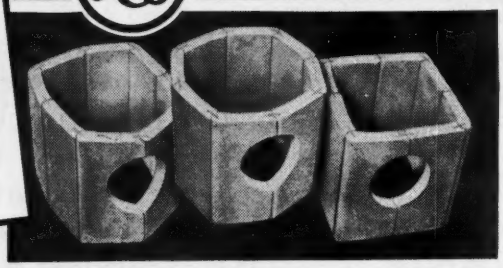

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spiel, very interesting in spots. At one place it says nobody cares too much if there is carbon formation in the boiler or smokepipe or chimney. After all this is expected. As one service man used to say during summer clean-ups (the contestant relates), "It's lying there so peacefully, it's a shame to disturb it!" The contestant complains that he has measured over three square inches of opening through the end of a popular draft regulator, with the regulator in its closed position, but does not say whether or not he's been able to buy excellent draft regulators that please him in being able to close almost dead-tight. The sketches on his entry sheets prove him inventive by showing (a) soot filtering material on a swinging disc draft regulator, which lets air in but traps soot on the way out, (b) a new draft regulator design featuring clamped-in braided asbestos that gives a tight seal with the regulator closed, and a removable soot sump besides, and (c) solenoid coils attached to a tight-close draft regulator, and wired to the ignition transformer circuit to close the swinging disc forcefully and in time when the burner starts. What about all these things? Should the man be designing draft regulators for some big manufacturer of them?

Here are some not-successful contest entries from Newark, N. J.:

1. The industry needs a good, cheap connector for high tension cables. This entry seems to be simply a complaint that many gun burners have low-priced connectors that come loose easily, and an accusation that the excellent connectors, used today on some burners, cost more than they should.

2. A recommendation that an ignition transformer be tested in the field by hooking it to a ½" spark gap. You blow on the spark with your mouth held close to it. (Wait a minute, Sparky, not TOO close!) You call the transformer weak if you can blow out the spark. The only trouble is we may be powerful with the wind or something; every transformer we judge by this method goes to the junk pile—even all the brand-new ones.

3. Something new under the sun. It says don't clean burner strainers too often; let them do some work first; a coating of sediment makes a strainer strain better, and the cellar floor stays cleaner. Well, if that's good advice to hand out, why not tell home owners and service men the same thing about air filters? When almost tight-plugged, they let through very little dirt!

4. Use a fitting with a tire valve on one end and a ⅛" pipe thread on the other end; it helps in testing, servicing, etc. using air pressure given by a hand pump. The idea's familiar; we published it years ago. Besides, supply houses sell this fitting for water pumps; the last one we bought cost us 20¢.

These ideas wind up the Useful Idea Contest. To those who did not win out this time, the judges and editors say: Too bad, better luck next time! Thank you for sending in entries, for the hundreds of entries that came in are what made this contest a tremendous success. Better keep handy your old issues of FUELOIL & OIL HEAT in which the contest winning ideas and other good ideas appeared. There may be another Useful Ideas contest, and looking through these old issues may help you win a prize next time.

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Oilheating Trends

(*Begins on page* 12)

$1.47 and after the rise it was $1.64. Some of the distributors found that they were squeezed by this added expense since their margins in most cases remained the same. The oil price division at Washington will undoubtedly take these costs into consideration in the months ahead when they have opportunity to study the situation in detail. The basic idea in the present price control program is that gross profits are not to be injured but it will take several months to establish a basis of equity. At present the oil price group has less than a dozen employees. It will have to grow considerably before it can do a real job.

DEALER COMMENTS: Typical comments on questions of the month are these . . . "The scarcity of aluminum will no doubt curtail warm air installations this year" . . . "We can not stand a wage boost because our operating expense is higher now than ever, cutting our profit margin" . . . "Will any sort of priority be given the oilheating industry for copper tubing, copper piping and Bx cable?" (Edit. note—Quite clearly we will not get a priority but so far there is nothing in the regulations to prevent our getting these materials other than the 20% reduction to manufacturers on all copper for civilian uses) . . . "We need information on deferments for service and maintenance men essential to civilian defense. (Edit. note—See page 51 February 1951 issue FUELOIL & OIL HEAT for an analysis of this situation)" . . . "Union fitters are still to get their raise but who is going to pay for the high installation charges?" . . . "We have the biggest stock in our history and all we need for a good year is to get the business" . . . "A sheet metal strike since January 2 has stopped installations in our market."

◈

James S. McIntyre has been named office manager of Sun Oil Company's southeastern marketing region office at Jacksonville, Fla. He formerly served as office manager of the Flint, Mich., marketing district, where he will be succeeded by *E. Lewis Martin*. Mr. McIntyre started with Sun in 1933, Mr. Martin in 1935. Both saw military service during World War II.

Hubert M. Pugh has joined Thermo-Products, Inc., North Judson, Ind., manufacturers of oilfired heating equipment and water heaters, as engineer. He is a Mechanical Engineering graduate from Purdue University.

Arthur Suit died on Christmas Day at Washington, D. C. he was regional manager in the area for Airtemp. Mr. Suit was an early day associate of Earl Marr and was well-known to the pioneer in the oilheating industry.

Andrew J. Eldred, president of Autopulse Corp., Ludington, Mich., died on January 7 at the age of 57. A native of Traverse City, Mich., he once was a reporter for the *Detroit News* and later entered the advertising field. He founded Autopulse in 1928, became its general manager and president in 1933. Mr. Eldred is survived by his wife and two daughters.

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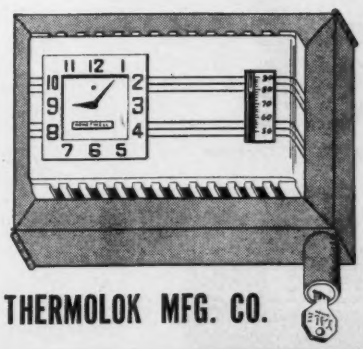

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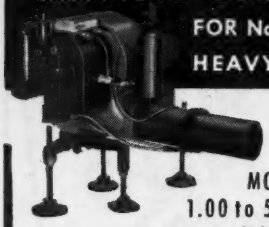

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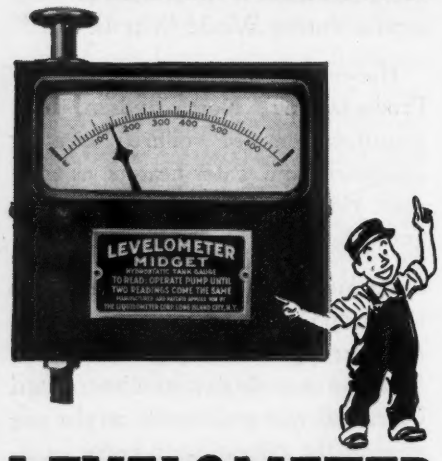

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DEGREE DAY TABLES

ONE MONTH ONLY						SEASON TO DATE				
	January		Percent			(Sept. 1 to Jan. 31)			Percent	
Normal	1950	1951	Change*			Normal	1950	1951	Change*	
1267	978	1204	—	4.9	Albany	3688	3375	3724	+	0.9
662	314	620	—	6.3	Atlanta	1837	1387	1989	+	8.2
922	562	806	—	12.6	Baltimore	2569	1930	2405	—	6.4
1101	886	953	—	13.4	Boston	3188	2737	2799	—	12.2
1220	926	1124	—	7.8	Buffalo	3604	3199	3548	—	1.5
1219	1020	1196	—	1.9	Chicago	3454	3129	3537	+	2.4
1009	658	902	—	10.6	Cincinnati	2901	2169	2847	—	1.8
1141	846	1061	—	7.0	Cleveland	3315	2764	3313	—	0.1
596	516	572	—	4.0	Dallas	1540	1295	1495	—	2.9
1026	1039	1094	+	6.6	Denver	3298	2914	2918	—	11.5
1326	1379	1380	+	4.0	Des Moines	3750	3609	3954	+	5.4
1228	997	1148	—	6.5	Detroit	3597	3224	3605	+	0.2
1249	1077	1197	—	4.1	Grand Rapids	3705	3337	3667	—	1.0
1146	939	1046	—	8.7	Hartford	3363	3076	3175	—	5.6
1337	1998	1487	+	11.2	Helena	4411	5239	4739	+	7.4
356	158	327	—	8.1	Houston	876	550	777	—	11.3
1104	818	1048	—	5.0	Indianapolis	3157	2603	3292	+	4.2
1083	1075	1057	—	2.4	Kansas City	2960	2674	2983	+	0.7
276	443	298	+	7.9	Los Angeles	659	857	518	—	21.4
931	641	881	—	5.3	Toledo	3463	3167	3698	+	6.7
1329	1228	1434	+	7.9	Milwaukee	3844	3684	4241	+	10.3
1597	1800	1721	+	7.7	Minneapolis	4602	4607	4919	+	6.9
319	48	236	—	26.0	New Orleans	794	623	813	+	2.4
1025	697	877	—	14.4	New York	2884	2192	2581	—	10.5
1287	1440	1380	+	7.2	Omaha	3597	3676	3787	+	5.2
962	642	848	—	11.8	Philadelphia	2661	2100	2524	—	5.1
1043	692	911	—	12.6	Pittsburgh	3076	2466	3008	—	2.0
1296	1176	1220	—	5.8	Portland, Me.	3898	3708	3811	—	2.2
775	1098	758	—	2.2	Portland, Ore.	2451	2652	2225	—	9.2
1103	847	929	—	15.7	Providence	3260	2689	2791	—	14.4
830	534	817	—	1.5	Roanoke, Va.	2442	2067	2642	+	8.2
999	829	981	—	1.8	St. Louis	2728	2295	2964	+	8.6
1084	1090	1045	—	3.6	Salt Lake City	3308	3139	2874	—	13.1
464	553	450	—	3.0	San Francisco	1394	1486	1155	—	17.1
1573	1530	1563	—	0.6	Sault Ste. Marie	4806	4771	4901	+	1.9
765	1117	758	—	0.9	Seattle	2577	2840	2329	—	9.6
1185	959	1147	—	2.2	Louisville	2608	2144	2749	+	5.4
929	513	774	—	16.7	Washington	2654	1904	2407	—	9.3

*Compared with normal. Note: Above figures secured from Monthly Meterological Summaries published by U. S. Weather Bureau offices in individual cities.